GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 93.2497 Seconds
(without alignments)
3520.040 Million cell updates/sec

Title: US-10-617-619A-8
Perfect score: 3464
Sequence: 1 ANAFLXXLRPGSLXRXCKXX.....MHEALHNHYTQKSLSLSPGK 641

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	3458	99.8	679	2	Q96PQ8	Q96pq8 homo sapien
2	2187	63.1	466	1	FA7_HUMAN	P08709 homo sapien
3	1654.5	47.8	444	1	FA7_RABIT	P98139 oryctolagus
4	1587.5	45.8	446	1	FA7_MOUSE	P70375 mus musculu
5	1586	45.8	407	1	FA7_BOVIN	P22457 bos taurus
6	1541	44.5	446	1	FA7_RAT	Q8k3u6 rattus norv
7	1272.5	36.7	482	2	Q7Z351	Q7z351 homo sapien
8	1271	36.7	473	2	Q6P055	Q6p055 homo sapien
9	1270.5	36.7	469	2	Q7Z7P5	Q7z7p5 homo sapien
10	1269.5	36.6	465	2	Q6GMX6	Q6gmx6 homo sapien
11	1265	36.5	330	1	GC1_HUMAN	P01857 homo sapien
12	1265	36.5	470	2	Q6PJA4	Q6pja4 homo sapien
13	1265	36.5	470	2	Q7Z5W1	Q7z5w1 homo sapien
14	1265	36.5	475	2	Q6GMW7	Q6gmw7 homo sapien
15	1265	36.5	476	2	Q6GMX1	Q6gmx1 homo sapien
16	1264	36.5	466	2	Q6IN78	Q6in78 homo sapien
17	1264	36.5	472	2	Q6N089	Q6n089 homo sapien
18	1264	36.5	473	2	Q6MZV7	Q6mzv7 homo sapien
19	1263.5	36.5	544	2	Q6PJ95	Q6pj95 homo sapien
20	1261.5	36.4	478	2	Q6PI81	Q6pi81 homo sapien
21	1261	36.4	475	2	Q6MZQ6	Q6mzq6 homo sapien
22	1261	36.4	480	2	Q6N094	Q6n094 homo sapien
23	1261	36.4	481	2	Q6N097	Q6n097 homo sapien
24	1259.5	36.4	466	2	Q6N096	Q6n096 homo sapien
25	1258	36.3	348	2	Q6PYX1	Q6pyx1 homo sapien
26	1258	36.3	480	2	Q6PJF1	Q6pjf1 homo sapien
27	1254.5	36.2	487	2	Q65ZL2	Q65zl2 mus sp. fv/
28	1254	36.2	475	2	Q6N095	Q6n095 homo sapien
29	1185.5	34.2	518	2	Q6N030	Q6n030 homo sapien
30	1184	34.2	354	2	Q86TT2	Q86tt2 homo sapien
31	1181.5	34.1	521	2	Q8N4Y9	Q8n4y9 homo sapien
32	1174.5	33.9	425	2	Q804X7	Q804x7 gallus gall
33	1169	33.7	509	2	Q8NF17	Q8nf17 homo sapien
34	1164.5	33.6	432	2	Q6GNA2	Q6gna2 xenopus lae
35	1164	33.6	290	1	GC3_HUMAN	P01860 homo sapien
36	1157.5	33.4	417	2	Q6N093	Q6n093 homo sapien
37	1151	33.2	465	2	Q6P6C4	Q6p6c4 homo sapien
38	1150	33.2	326	1	GC2_HUMAN	P01859 homo sapien
39	1146	33.1	464	2	Q6MZU6	Q6mzu6 homo sapien
40	1144	33.0	473	2	Q8TC63	Q8tc63 homo sapien
41	1142.5	33.0	327	1	GC4_HUMAN	P01861 homo sapien
42	1138	32.9	493	2	Q68CN4	Q68cn4 homo sapien
43	1137	32.8	476	2	Q6MZX7	Q6mzx7 homo sapien
44	933.5	26.9	433	2	Q90YK1	Q90yk1 brachydanio
45	929	26.8	323	1	GC_RABIT	P01870 oryctolagus

ALIGNMENTS

RESULT 1
Q96PQ8
ID Q96PQ8 PRELIMINARY; PRT; 679 AA.
AC Q96PQ8;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Factor VII active site mutant immunoconjugate.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21477448; PubMed=11593034; DOI=10.1073/pnas.201420298;
RA Hu Z., Garen A.;
RT "Targeting tissue factor on tumor vascular endothelial cells and tumor
RT cells for immunotherapy in mouse models of prostatic cancer.";
RL Proc. Natl. Acad. Sci. U.S.A. 98:12180-12185(2001).
RN [2]
RP SEQUENCE FROM N.A.
RA Hu Z., Garen A.;
RL Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF272774; AAK58686.2; -.
DR HSSP; P08709; 1KLI.
DR GO; GO:0005576; C:extracellular; IEA.
DR GO; GO:0005509; F:calcium ion binding; IEA.
DR GO; GO:0008233; F:peptidase activity; IEA.
DR GO; GO:0004295; F:trypsin activity; IEA.
DR GO; GO:0006508; P:proteolysis and peptidolysis; IEA.
DR InterPro; IPR000152; Asx_hydroxyl_S.
DR InterPro; IPR000742; EGF_2.
DR InterPro; IPR001881; EGF_Ca.
DR InterPro; IPR006209; EGF_like.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig_c1.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR001254; Peptidase_S1.
DR InterPro; IPR009003; Pept_Ser_Cys.
DR InterPro; IPR000294; VitK_dep_GLA.
DR Pfam; PF07654; C1-set; 2.
DR Pfam; PF00008; EGF; 1.
DR Pfam; PF00594; Gla; 1.
DR Pfam; PF00089; Trypsin; 1.
DR SMART; SM00179; EGF_CA; 1.
DR SMART; SM00069; GLA; 1.
DR SMART; SM00407; IGc1; 1.
DR SMART; SM00020; Tryp_SPc; 1.
DR PROSITE; PS00010; ASX_HYDROXYL; UNKNOWN_1.
DR PROSITE; PS00022; EGF_1; UNKNOWN_1.
DR PROSITE; PS01186; EGF_2; 1.
DR PROSITE; PS50026; EGF_3; 1.
DR PROSITE; PS01187; EGF_CA; 1.
DR PROSITE; PS00011; GLA_1; 1.

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DR   PROSITE; PS50835; IG_LIKE; 2.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_1.
DR   PROSITE; PS50240; TRYPSIN_DOM; 1.
DR   PROSITE; PS00134; TRYPSIN_HIS; UNKNOWN_1.
DR   PROSITE; PS00135; TRYPSIN_SER; 1.
KW   EGF-like domain; Hydrolase; Protease; Serine protease.
SQ   SEQUENCE   679 AA;  75552 MW;  0B0023AE70A067A1 CRC64;

  Query Match             99.8%;  Score 3458;  DB 2;  Length 679;
  Best Local Similarity   98.3%;  Pred. No. 7.4e-225;
  Matches  630;  Conservative   10;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||||:|::||::||||::||:|||||:|||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
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Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
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Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              |||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCAGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 458

Qy        421 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 518

Qy        481 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 578

Qy        541 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 638

Qy        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
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Db        639 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 679


RESULT 2
FA7_HUMAN
ID   FA7_HUMAN      STANDARD;      PRT;   466 AA.
AC   P08709; Q14339;
DT   01-JAN-1988 (Rel. 06, Created)
DT   01-JAN-1988 (Rel. 06, Last sequence update)
DT   25-OCT-2004 (Rel. 45, Last annotation update)
DE   Coagulation factor VII precursor (EC 3.4.21.21) (Serum prothrombin
DE   conversion accelerator) (SPCA) (Proconvertin) (Eptacog alfa).
GN   Name=F7;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Liver;
RX   MEDLINE=86205965; PubMed=3486420;
RA   Hagen F.S., Gray C.L., O'Hara P.J., Grant F.J., Saari G.C.,
RA   Woodbury R.G., Hart C.E., Insley M.Y., Kisiel W., Kurachi K.,
RA   Davie E.W.;
RT   "Characterization of a cDNA coding for human factor VII.";
RL   Proc. Natl. Acad. Sci. U.S.A. 83:2412-2416(1986).
RN   [2]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=87260948; PubMed=3037537;
RA   O'Hara P.J., Grant F.J., Haldeman B.A., Gray C.L., Insley M.Y.,
RA   Hagen F.S., Murray M.J.;
RT   "Nucleotide sequence of the gene coding for human factor VII, a
RT   vitamin K-dependent protein participating in blood coagulation.";
RL   Proc. Natl. Acad. Sci. U.S.A. 84:5158-5162(1987).
RN   [3]
RP   SEQUENCE FROM N.A., AND VARIANTS THR-352; GLN-413 AND LYS-445.
RA   Rieder M.J., Armel T.Z., Carrington D.P., Chung M.-W., Lee K.L.,
RA   Poel C.L., Toth E.J., Yi Q., Nickerson D.A.;
RT   "SeattleSNPs. NHLBI HL66682 program for genomic applications, UW-
RT   FHCRC, Seattle, WA (URL: http://pga.gs.washington.edu).";
RL   Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
RN   [4]
RP   SEQUENCE OF 61-466, AND POST-TRANSLATIONAL MODIFICATIONS.
RX   MEDLINE=89088153; PubMed=3264725;
RA   Thim L., Bjoern S., Christensen M., Nicolaisen E.M., Lund-Hansen T.,
RA   Pedersen A.H., Hedner U.;
RT   "Amino acid sequence and posttranslational modifications of human
RT   factor VIIa from plasma and transfected baby hamster kidney cells.";
RL   Biochemistry 27:7785-7793(1988).
RN   [5]
RP   CARBOHYDRATE-LINKAGE SITES SER-112 AND SER-120.
RX   MEDLINE=91250411; PubMed=1904059;
RA   Bjoern S., Foster D.C., Thim L., Wiberg F.C., Christensen M.,
RA   Komiyama Y., Pedersen A.H., Kisiel W.;
RT   "Human plasma and recombinant factor VII. Characterization of O-
RT   glycosylations at serine residues 52 and 60 and effects of site-
RT   directed mutagenesis of serine 52 to alanine.";
RL   J. Biol. Chem. 266:11051-11057(1991).
RN   [6]
RP   STRUCTURE OF CARBOHYDRATE ON SER-112.
RX   MEDLINE=90062160; PubMed=2511201;
RA   Nishimura H., Kawabata S., Kisiel W., Hase S., Ikenaka T., Takao T.,
RA   Shimonishi Y., Iwanaga S.;
RT   "Identification of a disaccharide (Xyl-Glc) and a trisaccharide (Xyl2-
RT   Glc) O-glycosidically linked to a serine residue in the first
RT   epidermal growth factor-like domain of human factors VII and IX and
RT   protein Z and bovine protein Z.";
RL   J. Biol. Chem. 264:20320-20325(1989).
RN   [7]
RP   STRUCTURE OF CARBOHYDRATE ON SER-112.
RX   MEDLINE=91344709; PubMed=2129367;
RA   Iwanaga S., Nishimura H., Kawabata S., Kisiel W., Hase S., Ikenaka T.;
RT   "A new trisaccharide sugar chain linked to a serine residue in the
RT   first EGF-like domain of clotting factors VII and IX and protein Z.";
RL   Adv. Exp. Med. Biol. 281:121-131(1990).
RN   [8]
RP   X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS) OF FVIIA IN COMPLEX WITH TF.
RX   MEDLINE=96175641; PubMed=8598903; DOI=10.1038/380041a0;
RA   Banner D.W., D'Arcy A., Chene C., Winkler F.K., Guha A.,
RA   Konigsberg W.H., Nemreson Y., Kirchhofer D.;
RT   "The crystal structure of the complex of blood coagulation factor VIIa
RT   with soluble tissue factor.";
RL   Nature 380:41-46(1996).
RN   [9]
RP   X-RAY CRYSTALLOGRAPHY (2.1 ANGSTROMS) OF FVIIA IN COMPLEX WITH TF.
RX   MEDLINE=99126538; PubMed=9925787; DOI=10.1006/jmbi.1998.2452;
RA   Zhang E., St Charles R., Tulinsky A.;
RT   "Structure of extracellular tissue factor complexed with factor VIIa
RT   inhibited with a BPTI mutant.";
RL   J. Mol. Biol. 285:2089-2104(1999).
RN   [10]
RP   STRUCTURE BY NMR OF 105-145.
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RX   MEDLINE=98367502; PubMed=9692950; DOI=10.1021/bi980522f;
RA   Muranyi A., Finn B.E., Gippert G.P., Forsen S., Stenflo J.,
RA   Drakenberg T.;
RT   "Solution structure of the N-terminal EGF-like domain from human
RT   factor VII.";
RL   Biochemistry 37:10605-10615(1998).
RN   [11]
RP   VARIANT GLN-364.
RX   MEDLINE=91300046; PubMed=2070047;
RA   O'Brien D.P., Gale K.M., Anderson J.S., McVey J.H., Miller G.J.,
RA   Meade T.W., Tuddenham E.G.D.;
RT   "Purification and characterization of factor VII 304-Gln: a variant
RT   molecule with reduced activity isolated from a clinically unaffected
RT   male.";
RL   Blood 78:132-140(1991).
RN   [12]
RP   VARIANTS GLN-364 AND PHE-370.
RX   MEDLINE=92340074; PubMed=1634227;
RA   Marchetti G., Patracchini P., Gemmati D., Derosa V., Pinotti M.,
RA   Rodorigo G., Casonato A., Girolami A., Bernardi F.;
RT   "Detection of two missense mutations and characterization of a repeat
RT   polymorphism in the factor VII gene (F7).";
RL   Hum. Genet. 89:497-502(1992).
RN   [13]
RP   VARIANT TYR-238.
RX   MEDLINE=93372811; PubMed=8364544;
RA   Marchetti G., Ferrati M., Patracchini P., Redaelli R., Bernardi F.;
RT   "A missense mutation (178Cys-->Tyr) and two neutral dimorphisms
RT   (115His and 333Ser) in the human coagulation factor VII gene.";
RL   Hum. Mol. Genet. 2:1055-1056(1993).
RN   [14]
RP   VARIANTS.
RX   MEDLINE=94061028; PubMed=8242057;
RA   Takamiya O., Kemball-Cook G., Martin D.M.A., Cooper D.N.,
RA   von Felten A., Meili E., Hahn I., Prangnell D.R., Lumley H.,
RA   Tuddenham E.G.D., McVey J.H.;
RT   "Detection of missense mutations by single-strand conformational
RT   polymorphism (SSCP) analysis in five dysfunctional variants of
RT   coagulation factor VII.";
RL   Hum. Mol. Genet. 2:1355-1359(1993).
RN   [15]
RP   VARIANTS CHARLOTTE GLN-139 AND GLN-212.
RX   MEDLINE=94264305; PubMed=8204879;
RA   Chaing S., Clarke B., Sridhara S., Chu K., Friedman P., Vandusen W.,
RA   Roberts H.R., Blajchman M., Monroe D.M., High K.A.;
RT   "Severe factor VII deficiency caused by mutations abolishing the
RT   cleavage site for activation and altering binding to tissue factor.";
RL   Blood 83:3524-3535(1994).
RN   [16]
RP   VARIANT SER-367.
RX   PubMed=7860081;
RA   Dewald G., Noethen M.M., Ruther K.;
RT   "A common Ser/Thr polymorphism in the perforin-homologous region of
RT   human complement component C7.";
RL   Hum. Hered. 44:301-304(1994).
RN   [17]
RP   VARIANT VAL-354.
RX   MEDLINE=95072589; PubMed=7981691;
RA   Bernardi F., Castaman G., Redaelli R., Pinotti M., Lunghi B.,
RA   Rodeghiero F., Marchetti G.;
RT   "Topologically equivalent mutations causing dysfunctional coagulation
RT   factors VII (294Ala-->Val) and X (334Ser-->Pro).";
RL   Hum. Mol. Genet. 3:1175-1177(1994).
RN   [18]
RP   VARIANT MIE HIS-307.
RX   MEDLINE=95064662; PubMed=7974346;
RA   Ohiwa M., Hayashi T., Wada H., Minamikawa K., Shirakawa S., Suzuki K.;
RT   "Factor VII Mie: homozygous asymptomatic type I deficiency caused by
RT   an amino acid substitution of His (CAC) for Arg(247) (CGC) in the
RT   catalytic domain.";
RL   Thromb. Haemost. 71:773-777(1994).
RN   [19]
RP   VARIANT MET-419.
RX   MEDLINE=96247510; PubMed=8652821;
RA   Arbini A.A., Mannucci P.M., Bauer K.A.;
RT   "A Thr359Met mutation in factor VII of a patient with a hereditary
RT   deficiency causes defective secretion of the molecule.";
RL   Blood 87:5085-5094(1996).
RN   [20]
RP   VARIANTS TRP-283; LYS-325; VAL-358; GLN-364; GLU-402 AND GLN-413.
RX   MEDLINE=97001216; PubMed=8844208;
RX   DOI=10.1002/(SICI)1098-1004(1996)8:2<108::AID-HUMU2>3.3.CO;2-6;
RA   Bernardi F., Castaman G., Pinotti M., Ferraresi P., di Iasio M.G.,
RA   Lunghi B., Rodeghiero F., Marchetti G.;
RT   "Mutation pattern in clinically asymptomatic coagulation factor VII
RT   deficiency.";
RL   Hum. Mutat. 8:108-115(1996).
RN   [21]
RP   VARIANT VAL-304.
RX   MEDLINE=97037613; PubMed=8883260;
RA   Tamary H., Fromovich Y., Shalmon L., Reich Z., Dym O., Lanir N.,
RA   Brenner B., Paz M., Luder A.S., Blau O., Korostishevsky M., Zaizov R.,
RA   Seligsohn U.;
RT   "Ala244Val is a common, probably ancient mutation causing factor VII
RT   deficiency in Moroccan and Iranian Jews.";
RL   Thromb. Haemost. 76:283-291(1996).
RN   [22]
RP   VARIANT MORIOKA PRO-13.
RX   MEDLINE=98235713; PubMed=9576180;
RA   Ozawa T., Takikawa Y., Niiya K., Ejiri N., Suzuki K., Sato S.,
RA   Sakuragawa N.;
RT   "Factor VII Morioka (FVII L-26P): a homozygous missense mutation in
RT   the signal sequence identified in a patient with factor VII
RT   deficiency.";
RL   Br. J. Haematol. 101:47-49(1998).
RN   [23]
RP   VARIANTS MALTA THR-194 AND VAL-304.
RX   MEDLINE=98112461; PubMed=9452082;
RA   Alshinawi C., Scerri C., Galdies R., Aquilina A., Felice A.E.;
RT   "Two new missense mutations (P134T and A244V) in the coagulation
RT   factor VII gene.";
RL   Hum. Mutat. Suppl. 1:S189-S191(1998).
RN   [24]

  Query Match            63.1%;  Score 2187;  DB 1;  Length 466;
  Best Local Similarity  97.5%;  Pred. No. 2.7e-139;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db         61 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 120

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 180

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
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Db        181 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 240

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 300

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 360

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 420

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        421 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 466
```

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RESULT 3
FA7_RABIT
ID   FA7_RABIT      STANDARD;      PRT;   444 AA.
AC   P98139; P79224;
DT   01-FEB-1996 (Rel. 33, Created)
DT   15-JUL-1998 (Rel. 36, Last sequence update)
DT   25-OCT-2004 (Rel. 45, Last annotation update)
DE   Coagulation factor VII precursor (EC 3.4.21.21) (Serum prothrombin
DE   conversion accelerator).
GN   Name=F7;
OS   Oryctolagus cuniculus (Rabbit).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
OX   NCBI_TaxID=9986;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Liver;
RX   MEDLINE=93190306; PubMed=8383365; DOI=10.1016/0049-3848(93)90048-S;
RA   Brothers A.B., Clarke B.J., Sheffield W.P., Blajchman M.A.;
RT   "Complete nucleotide sequence of the cDNA encoding rabbit coagulation
RT   factor VII.";
RL   Thromb. Res. Suppl. 69:231-238(1993).
RN   [2]
RP   REVISION TO 395.
RC   TISSUE=Liver;
RA   Ruiz S.R., Blajchman M.A., Clarke B.J.;
RL   Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
CC   -!- FUNCTION: Initiates the extrinsic pathway of blood coagulation.
CC       Serine protease that circulates in the blood in a zymogen form.
CC       Factor VII is converted to factor VIIa by factor Xa, factor XIIa,
CC       factor IXa, or thrombin by minor proteolysis. In the presence of
CC       tissue factor and calcium ions, factor VIIa then converts factor X
CC       to factor Xa by limited proteolysis. Factor VIIa will also convert
CC       factor IX to factor IXa in the presence of tissue factor and
CC       calcium (By similarity).
CC   -!- CATALYTIC ACTIVITY: Hydrolyzes one Arg-|-Ile bond in factor X to
CC       form factor Xa.
CC   -!- SUBUNIT: Heterodimer of a light chain and a heavy chain linked by
CC       a disulfide bond (By similarity).
CC   -!- TISSUE SPECIFICITY: Plasma.
CC   -!- PTM: The vitamin K-dependent, enzymatic carboxylation of some
CC       glutamate residues allows the modified protein to bind calcium (By
CC       similarity).
CC   -!- SIMILARITY: Belongs to the peptidase S1 family.
CC   -!- SIMILARITY: Contains 2 EGF-like domains.
CC   -!- SIMILARITY: Contains 1 gamma-carboxy-glutamate domain (Gla)
CC       domain.
CC   ----------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; U77477; AAB37326.1; -.
DR   HSSP; P08709; 1FAK.
DR   MEROPS; S01.215; -.
DR   InterPro; IPR000152; Asx_hydroxyl_S.
DR   InterPro; IPR000742; EGF_2.
DR   InterPro; IPR001881; EGF_Ca.
DR   InterPro; IPR001438; EGF_II.
DR   InterPro; IPR006209; EGF_like.
DR   InterPro; IPR002383; GLA_blood.
DR   InterPro; IPR001254; Peptidase_S1.
DR   InterPro; IPR001314; Peptidase_S1A.
DR   InterPro; IPR009003; Pept_Ser_Cys.
DR   InterPro; IPR000294; VitK_dep_GLA.
DR   Pfam; PF00008; EGF; 2.
DR   Pfam; PF00594; Gla; 1.
DR   Pfam; PF00089; Trypsin; 1.
DR   PRINTS; PR00722; CHYMOTRYPSIN.
DR   PRINTS; PR00010; EGFBLOOD.
DR   PRINTS; PR00001; GLABLOOD.
DR   SMART; SM00179; EGF_CA; 1.
DR   SMART; SM00069; GLA; 1.
DR   SMART; SM00020; Tryp_SPc; 1.
DR   PROSITE; PS00010; ASX_HYDROXYL; 1.
DR   PROSITE; PS00022; EGF_1; 1.
DR   PROSITE; PS01186; EGF_2; 1.
DR   PROSITE; PS50026; EGF_3; 1.
DR   PROSITE; PS01187; EGF_CA; 1.
DR   PROSITE; PS00011; GLA_1; 1.
DR   PROSITE; PS50998; GLA_2; 1.
DR   PROSITE; PS50240; TRYPSIN_DOM; 1.
DR   PROSITE; PS00134; TRYPSIN_HIS; 1.
DR   PROSITE; PS00135; TRYPSIN_SER; 1.
KW   Blood coagulation; Calcium-binding; EGF-like domain;
KW   Gamma-carboxyglutamic acid; Glycoprotein; Hydrolase; Hydroxylation;
KW   Plasma; Repeat; Serine protease; Signal; Vitamin K; Zymogen.
FT   SIGNAL        1     21       Potential.
FT   PROPEP       22     39       Potential.
FT   CHAIN        40    191       Factor VII light chain.
FT   CHAIN       192    444       Factor VII heavy chain.
FT   DOMAIN       40     84       Gla.
FT   DOMAIN       85    121       EGF-like 1, calcium-binding (Potential).
FT   DOMAIN      126    167       EGF-like 2.
FT   DOMAIN      192    444       Serine protease.
FT   SITE        191    192       Cleavage (by factor Xa, factor XIIa,
FT                                factor IXa, or thrombin) (By similarity).
FT   ACT_SITE    232    232       By similarity.
FT   ACT_SITE    281    281       By similarity.
FT   ACT_SITE    383    383       By similarity.
FT   BINDING     377    377       Substrate (By similarity).
FT   DISULFID     56     61       By similarity.
FT   DISULFID     89    100       By similarity.
FT   DISULFID     94    109       By similarity.
FT   DISULFID    111    120       By similarity.
FT   DISULFID    130    141       By similarity.
FT   DISULFID    137    151       By similarity.
FT   DISULFID    153    166       By similarity.
FT   DISULFID    174    301       By similarity.
FT   DISULFID    198    203       By similarity.
FT   DISULFID    217    233       By similarity.
FT   DISULFID    349    368       By similarity.
FT   DISULFID    379    407       By similarity.
FT   MOD_RES      45     45       4-carboxyglutamate.
FT   MOD_RES      46     46       4-carboxyglutamate.
FT   MOD_RES      53     53       4-carboxyglutamate.
FT   MOD_RES      55     55       4-carboxyglutamate.
FT   MOD_RES      58     58       4-carboxyglutamate.
FT   MOD_RES      59     59       4-carboxyglutamate.
FT   MOD_RES      64     64       4-carboxyglutamate.
FT   MOD_RES      65     65       4-carboxyglutamate.
FT   MOD_RES      68     68       4-carboxyglutamate.
FT   MOD_RES      74     74       4-carboxyglutamate.
FT   MOD_RES     102    102       3-hydroxyaspartate (By similarity).
FT   CARBOHYD    211    211       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    242    242       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    306    306       N-linked (GlcNAc. . .) (Potential).
SQ   SEQUENCE   444 AA;  49011 MW;  0481ABC4FE5427F8 CRC64;

  Query Match             47.8%;  Score 1654.5;  DB 1;  Length 444;
  Best Local Similarity   71.9%;  Pred. No. 2.1e-103;
  Matches  292;  Conservative   52;  Mismatches   61;  Indels    1;  Gaps    1;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||:||::||||||:|:||:: |||::||::|:  :||| |||:|:|||||||:|||||||
Db         40 ANSFLEELRPGSLERECKEELCSFEEAREVFQSTERTKQFWITYNDGDQCASNPCQNGGS 99

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              |:||:|||||||  |||||| :|:|||||: |||||||||||| |::||||||||:|
Db        100 CEDQIQSYICFCLADFEGRNCEKNKNDQLICMYENGGCEQYCSDHVGSQRSCRCHEGYTL 159
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Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              | :||||||||:|||||:| |||| || ||||||||||||||||||   |:     ||||
Db        160 LPNGVSCTPTVDYPCGKVPALEKRGASNPQGRIVGGKVCPKGECPWQAALMNGSTLLCGG 219

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              :|::| ||||||||||: : |||  ||||||||||:|||| | |||:|:|  |||| |:
Db        220 SLLDTHWVVSAAHCFDKLSSLRNLTIVLGEHDLSEHEGDEQVRHVAQLIMPDKYVPGKTD 279

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              |||||||| ||  ||::|||||||||| ||| ||| :||| |||||||| ||| | ||| :
Db        280 HDIALLRLLQPAALTNNVVPLCLPERNFSESTLATIRFSRVSGWGQLLYRGALARELMAI 339

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              :|||||||||::||      || :|  |||||| |||||:|||||||||| | |||||||
Db        340 DVPRLMTQDCVEQSEHKPGSPEVTGNMFCAGYLDGSKDACKGDSGGPHATSYHGTWYLTG 399

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              :||||:||| ||| ||||||||:| ||| :||||:   |:  | |||
Db        400 VVSWGEGCAAVGHVGVYTRVSRYTEWLSRLMRSKLHHGI-QRHPFP 444


RESULT 4
FA7_MOUSE
ID   FA7_MOUSE      STANDARD;      PRT;   446 AA.
AC   P70375; Q61109;
DT   01-NOV-1997 (Rel. 35, Created)
DT   01-NOV-1997 (Rel. 35, Last sequence update)
DT   25-OCT-2004 (Rel. 45, Last annotation update)
DE   Coagulation factor VII precursor (EC 3.4.21.21) (Serum prothrombin
DE   conversion accelerator).
GN   Name=F7; Synonyms=Cf7;
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Liver;
RX   MEDLINE=96276538; PubMed=8701412;
RA   Idusogie E., Rosen E., Geng J.P., Carmeliet P., Collen D.,
RA   Castellino F.J.;
RT   "Characterization of a cDNA encoding murine coagulation factor VII.";
RL   Thromb. Haemost. 75:481-487(1996).
RN   [2]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=97127167; PubMed=8972017;
RA   Idusogie E., Rosen E.D., Carmeliet P., Collen D., Castellino F.J.;
RT   "Nucleotide structure and characterization of the murine blood
RT   coagulation factor VII gene.";
RL   Thromb. Haemost. 76:957-964(1996).
CC   -!- FUNCTION: Initiates the extrinsic pathway of blood coagulation.
CC       Serine protease that circulates in the blood in a zymogen form.
CC       Factor VII is converted to factor VIIa by factor Xa, factor XIIa,
CC       factor IXa, or thrombin by minor proteolysis. In the presence of
CC       tissue factor and calcium ions, factor VIIa then converts factor X
CC       to factor Xa by limited proteolysis. Factor VIIa will also convert
CC       factor IX to factor IXa in the presence of tissue factor and
CC       calcium (By similarity).
CC   -!- CATALYTIC ACTIVITY: Hydrolyzes one Arg-|-Ile bond in factor X to
CC       form factor Xa.
CC   -!- SUBUNIT: Heterodimer of a light chain and a heavy chain linked by
CC       a disulfide bond (By similarity).
CC   -!- TISSUE SPECIFICITY: Plasma.
CC   -!- PTM: The vitamin K-dependent, enzymatic carboxylation of some
CC       glutamate residues allows the modified protein to bind calcium (By
CC       similarity).
CC   -!- SIMILARITY: Belongs to the peptidase S1 family.
CC   -!- SIMILARITY: Contains 2 EGF-like domains.
CC   -!- SIMILARITY: Contains 1 gamma-carboxy-glutamate domain (Gla)
CC       domain.
CC   ----------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; U44795; AAC52570.1; -.
DR   EMBL; U66079; AAC33796.1; -.
DR   HSSP; P08709; 1BF9.
DR   MEROPS; S01.215; -.
DR   MGD; MGI:109325; F7.
DR   InterPro; IPR000152; Asx_hydroxyl_S.
DR   InterPro; IPR000742; EGF_2.
DR   InterPro; IPR001881; EGF_Ca.
DR   InterPro; IPR001438; EGF_II.
DR   InterPro; IPR006209; EGF_like.
DR   InterPro; IPR002383; GLA_blood.
DR   InterPro; IPR001254; Peptidase_S1.
DR   InterPro; IPR001314; Peptidase_S1A.
DR   InterPro; IPR009003; Pept_Ser_Cys.
DR   InterPro; IPR000294; VitK_dep_GLA.
DR   Pfam; PF00008; EGF; 2.
DR   Pfam; PF00594; Gla; 1.
DR   Pfam; PF00089; Trypsin; 1.
DR   PRINTS; PR00722; CHYMOTRYPSIN.
DR   PRINTS; PR00010; EGFBLOOD.
DR   PRINTS; PR00001; GLABLOOD.
DR   SMART; SM00179; EGF_CA; 1.
DR   SMART; SM00069; GLA; 1.
DR   SMART; SM00020; Tryp_SPc; 1.
DR   PROSITE; PS00010; ASX_HYDROXYL; 1.
DR   PROSITE; PS00022; EGF_1; 1.
DR   PROSITE; PS01186; EGF_2; FALSE_NEG.
DR   PROSITE; PS50026; EGF_3; 1.
DR   PROSITE; PS01187; EGF_CA; 1.
DR   PROSITE; PS00011; GLA_1; 1.
DR   PROSITE; PS50998; GLA_2; 1.
DR   PROSITE; PS50240; TRYPSIN_DOM; 1.
DR   PROSITE; PS00134; TRYPSIN_HIS; 1.
DR   PROSITE; PS00135; TRYPSIN_SER; 1.
KW   Blood coagulation; Calcium-binding; EGF-like domain;
KW   Gamma-carboxyglutamic acid; Glycoprotein; Hydrolase; Hydroxylation;
KW   Plasma; Repeat; Serine protease; Signal; Vitamin K; Zymogen.
FT   SIGNAL        1     24       Potential.
FT   PROPEP       25     41       Potential.
FT   CHAIN        42    193       Factor VII light chain.
FT   CHAIN       194    446       Factor VII heavy chain.
FT   DOMAIN       42     86       Gla.
FT   DOMAIN       87    123       EGF-like 1, calcium-binding (Potential).
FT   DOMAIN      128    169       EGF-like 2.
FT   DOMAIN      194    446       Serine protease.
FT   SITE        193    194       Cleavage (by factor Xa, factor XIIa,
FT                                factor IXa, or thrombin) (By similarity).
FT   ACT_SITE    234    234       By similarity.
FT   ACT_SITE    283    283       By similarity.
FT   ACT_SITE    385    385       By similarity.
FT   BINDING     379    379       Substrate (By similarity).
FT   DISULFID     58     63       By similarity.
FT   DISULFID     91    102       By similarity.
FT   DISULFID     96    111       By similarity.
FT   DISULFID    113    122       By similarity.
FT   DISULFID    132    143       By similarity.
FT   DISULFID    139    153       By similarity.
FT   DISULFID    155    168       By similarity.
FT   DISULFID    176    303       By similarity.
FT   DISULFID    200    205       By similarity.
FT   DISULFID    219    235       By similarity.
FT   DISULFID    351    370       By similarity.
FT   DISULFID    381    409       By similarity.
FT   MOD_RES      47     47       4-carboxyglutamate.
FT   MOD_RES      48     48       4-carboxyglutamate.
FT   MOD_RES      55     55       4-carboxyglutamate.
FT   MOD_RES      57     57       4-carboxyglutamate.
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FT   MOD_RES      60     60       4-carboxyglutamate.
FT   MOD_RES      61     61       4-carboxyglutamate.
FT   MOD_RES      66     66       4-carboxyglutamate.
FT   MOD_RES      67     67       4-carboxyglutamate.
FT   MOD_RES      70     70       4-carboxyglutamate.
FT   MOD_RES      76     76       4-carboxyglutamate.
FT   MOD_RES     104    104       3-hydroxyaspartate (By similarity).
FT   CARBOHYD    186    186       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    244    244       N-linked (GlcNAc. . .) (Potential).
FT   CONFLICT     99     99       G -> V (in Ref. 2).
SQ   SEQUENCE   446 AA;  50276 MW;  2512E44A45CBC96E CRC64;

  Query Match             45.8%;  Score 1587.5;  DB 1;  Length 446;
  Best Local Similarity   68.1%;  Pred. No. 7.1e-99;
  Matches  275;  Conservative   56;  Mismatches   72;  Indels    1;  Gaps    1;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||: |::| ||||:|:| ::|||||::||:|||  :||| ||| |||||||||:||||||:
Db         42 ANSLLEELWPGSLERECNEEQCSFEEAREIFKSPERTKQFWIVYSDGDQCASNPCQNGGT 101

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              |:| |:||:|||| |||||||  |::|||| |||| |:||| || ||||:| ||| |:|
Db        102 CQDHLKSYVCFCLLDFEGRNCEKSKNEQLICANENGDCDQYCRDHVGTKRTCSCHEDYTL 161

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              | ||| | ||||||:||::||||:|  ||||||| |||||||| :| :||  |||
Db        162 QPDEVSCKPKVEYPCGRIPVVEKRNSSSRQGRIVGGNVCPKGECPWQAVLKINGLLLCGA 221

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              |::  |:|:|||||| |: | |:  |:|||| || ||||| ||| |||:|  |: |  |
Db        222 VLLDARWIVTAAHCFDNIRYWGNITVVMGEHDFSEKDGDEQVRRVTQVIMPDKYIRGKIN 281

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              |||||||||:||  ||:|||||||||::||| ||| :||| ||||||||||||||||| :
Db        282 HDIALLRLHRPVTFTDYVVPLCLPEKSFSENTLARIRFSRVSGWGQLLDRGATALELMSI 341

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              |||||||||: ::   ::| ||| |||||| ||:||:|||||||||||| |||||||
Db        342 EVPRLMTQDCLEHAKHSSNTPKITENMFCAGYMDGTKDACKGDSGGPHATHYHGTWYLTG 401

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAP 404
              :||||:||| :|| ||||||||||:|| : | |: : ||  | |
Db        402 VVSWGEGCAAIGHIGVYTRVSQYIDWLVRHMDSKLQVGV-FRLP 444


RESULT 5
FA7_BOVIN
ID   FA7_BOVIN      STANDARD;      PRT;   407 AA.
AC   P22457;
DT   01-AUG-1991 (Rel. 19, Created)
DT   01-AUG-1991 (Rel. 19, Last sequence update)
DT   25-OCT-2004 (Rel. 45, Last annotation update)
DE   Coagulation factor VII (EC 3.4.21.21) (Serum prothrombin conversion
DE   accelerator).
GN   Name=F7;
OS   Bos taurus (Bovine).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC   Bovinae; Bos.
OX   NCBI_TaxID=9913;
RN   [1]
RP   SEQUENCE.
RX   MEDLINE=89008362; PubMed=3049594;
RA   Takeya H., Kawabata S., Nakagawa K., Yamamichi Y., Miyata T.,
RA   Iwanaga S.;
RT   "Bovine factor VII. Its purification and complete amino acid
RT   sequence.";
RL   J. Biol. Chem. 263:14868-14877(1988).
RN   [2]
RP   STRUCTURE OF CARBOHYDRATE ON SER-52.
RX   MEDLINE=89213999; PubMed=3149637;
RA   Hase S., Kawabata S., Nishimura H., Takeya H., Sueyoshi T., Miyata T.,
RA   Iwanaga S., Takao T., Shimonishi Y., Ikenaka T.;
RT   "A new trisaccharide sugar chain linked to a serine residue in bovine
RT   blood coagulation factors VII and IX.";
RL   J. Biochem. 104:867-868(1988).
RN   [3]
RP   STRUCTURE OF CARBOHYDRATE ON SER-52.
RX   MEDLINE=91344709; PubMed=2129367;
RA   Iwanaga S., Nishimura H., Kawabata S., Kisiel W., Hase S., Ikenaka T.;
RT   "A new trisaccharide sugar chain linked to a serine residue in the
RT   first EGF-like domain of clotting factors VII and IX and protein Z.";
RL   Adv. Exp. Med. Biol. 281:121-131(1990).
CC   -!- FUNCTION: Initiates the extrinsic pathway of blood coagulation.
CC       Serine protease that circulates in the blood in a zymogen form.
CC       Factor VII is converted to factor VIIa by factor Xa, factor XIIa,
CC       factor IXa, or thrombin by minor proteolysis. In the presence of
CC       tissue factor and calcium ions, factor VIIa then converts factor X
CC       to factor Xa by limited proteolysis. Factor VIIa will also convert
CC       factor IX to factor IXa in the presence of tissue factor and
CC       calcium.
CC   -!- CATALYTIC ACTIVITY: Hydrolyzes one Arg-|-Ile bond in factor X to
CC       form factor Xa.
CC   -!- SUBUNIT: Heterodimer of a light chain and a heavy chain linked by
CC       a disulfide bond.
CC   -!- TISSUE SPECIFICITY: Plasma.
CC   -!- PTM: The vitamin K-dependent, enzymatic carboxylation of some
CC       glutamate residues allows the modified protein to bind calcium.
CC   -!- SIMILARITY: Belongs to the peptidase S1 family.
CC   -!- SIMILARITY: Contains 2 EGF-like domains.
CC   -!- SIMILARITY: Contains 1 gamma-carboxy-glutamate domain (Gla)
CC       domain.
DR   PIR; A31979; KFBO7.
DR   HSSP; P08709; 1BF9.
DR   MEROPS; S01.215; -.
DR   InterPro; IPR000152; Asx_hydroxyl_S.
DR   InterPro; IPR000742; EGF_2.
DR   InterPro; IPR001881; EGF_Ca.
DR   InterPro; IPR001438; EGF_II.
DR   InterPro; IPR006209; EGF_like.
DR   InterPro; IPR002383; GLA_blood.
DR   InterPro; IPR001254; Peptidase_S1.
DR   InterPro; IPR001314; Peptidase_S1A.
DR   InterPro; IPR009003; Pept_Ser_Cys.
DR   InterPro; IPR000294; VitK_dep_GLA.
DR   Pfam; PF00008; EGF; 2.
DR   Pfam; PF00594; Gla; 1.
DR   Pfam; PF00089; Trypsin; 1.
DR   PRINTS; PR00722; CHYMOTRYPSIN.
DR   PRINTS; PR00010; EGFBLOOD.
DR   PRINTS; PR00001; GLABLOOD.
DR   SMART; SM00179; EGF_CA; 1.
DR   SMART; SM00069; GLA; 1.
DR   SMART; SM00020; Tryp_SPc; 1.
DR   PROSITE; PS00010; ASX_HYDROXYL; 1.
DR   PROSITE; PS00022; EGF_1; 1.
DR   PROSITE; PS01186; EGF_2; 2.
DR   PROSITE; PS50026; EGF_3; 1.
DR   PROSITE; PS01187; EGF_CA; 1.
DR   PROSITE; PS00011; GLA_1; 1.
DR   PROSITE; PS50998; GLA_2; 1.
DR   PROSITE; PS50240; TRYPSIN_DOM; 1.
DR   PROSITE; PS00134; TRYPSIN_HIS; 1.
DR   PROSITE; PS00135; TRYPSIN_SER; 1.
KW   Blood coagulation; Calcium-binding; Direct protein sequencing;
KW   EGF-like domain; Gamma-carboxyglutamic acid; Glycoprotein; Hydrolase;
KW   Plasma; Repeat; Serine protease; Vitamin K; Zymogen.
FT   CHAIN         1    152       Factor VII light chain.
FT   CHAIN       153    407       Factor VII heavy chain.
FT   DOMAIN        1     45       Gla.
FT   DOMAIN       46     82       EGF-like 1, calcium-binding (Potential).
FT   DOMAIN       87    128       EGF-like 2.
FT   DOMAIN      153    407       Serine protease.
FT   SITE        152    153       Cleavage (by factor Xa, factor XIIa,
FT                                factor IXa, or thrombin).
FT   ACT_SITE    193    193       By similarity.
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FT   ACT_SITE    242    242       By similarity.
FT   ACT_SITE    344    344       By similarity.
FT   BINDING     338    338       Substrate (By similarity).
FT   DISULFID     17     22       By similarity.
FT   DISULFID     50     61       By similarity.
FT   DISULFID     55     70       By similarity.
FT   DISULFID     72     81       By similarity.
FT   DISULFID     91    102       By similarity.
FT   DISULFID     98    112       By similarity.
FT   DISULFID    114    127       By similarity.
FT   DISULFID    135    262       By similarity.
FT   DISULFID    159    164       By similarity.
FT   DISULFID    178    194       By similarity.
FT   DISULFID    310    329       By similarity.
FT   DISULFID    340    368       By similarity.
FT   MOD_RES       6      6       4-carboxyglutamate.
FT   MOD_RES       7      7       4-carboxyglutamate.
FT   MOD_RES      14     14       4-carboxyglutamate.
FT   MOD_RES      16     16       4-carboxyglutamate.
FT   MOD_RES      19     19       4-carboxyglutamate.
FT   MOD_RES      20     20       4-carboxyglutamate.
FT   MOD_RES      25     25       4-carboxyglutamate.
FT   MOD_RES      26     26       4-carboxyglutamate.
FT   MOD_RES      29     29       4-carboxyglutamate.
FT   MOD_RES      35     35       4-carboxyglutamate.
FT   CARBOHYD     52     52       O-linked (Glc. . .).
FT   CARBOHYD    145    145       N-linked (GlcNAc. . .).
FT   CARBOHYD    203    203       N-linked (GlcNAc. . .).
SQ   SEQUENCE   407 AA;  44431 MW;  703E1FE0636F7F10 CRC64;

  Query Match             45.8%;  Score 1586;  DB 1;  Length 407;
  Best Local Similarity   69.6%;  Pred. No. 8e-99;
  Matches  275;  Conservative   55;  Mismatches   65;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              || ||::| ||||:|:|::: |||::| :||:: :||: ||:||:|||||||||||||||
Db          1 ANGFLEELLPGSLERECREELCSFEEAHEIFRNEERTRQFWVSYNDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              |:|||:||||||   |||||||| |  |||| |:||||||||    |  | | |||||:|
Db         61 CEDQLRSYICFCPDGFEGRNCETDKQSQLICANDNGGCEQYCGADPGAGRFCWCHEGYAL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||| |||||||||||:||||| |||||||||| |||||||||| :| :||| ||||
Db        121 QADGVSCAPTVEYPCGKIPVLEKRNGSKPQGRIVGGHVCPKGECPWQAMLKLNGALLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||:   |||||||||:::::  || |||||||||  :| || |||||:|:|  |||| |:
Db        181 TLVGPAWVVSAAHCFERLRSRGNLTAVLGEHDLSRVEGPEQERRVAQIIVPKQYVPGQTD 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||:|||:| ||| | ||| |||||:  |:::|||||||| ||||||||:|| || :|||:
Db        241 HDVALLQLAQPVALGDHVAPLCLPDPDFADQTLAFVRFSAVSGWGQLLERGVTARKLMVV 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||:|||||||||:    | :|: ||||||||||||:|||||||||| :||||:|||
Db        301 LVPRLLTQDCLQQSRQRPGGPVVTDNMFCAGYSDGSKDACKGDSGGPHATRFRGTWFLTG 360

Qy        361 IVSWGQGCATVGHPGVYTRVSQYIEWLQKLMRSEP 395
              :||||:|||  ||||:|||||:|  ||::||   |
Db        361 VVSWGEGCAAAGHFGIYTRVSRYTAWLRQLMGHPP 395


RESULT 6
FA7_RAT
ID   FA7_RAT        STANDARD;      PRT;   446 AA.
AC   Q8K3U6;
DT   05-JUL-2004 (Rel. 44, Created)
DT   05-JUL-2004 (Rel. 44, Last sequence update)
DT   25-OCT-2004 (Rel. 45, Last annotation update)
DE   Coagulation factor VII precursor (EC 3.4.21.21) (Serum prothrombin
DE   conversion accelerator).
GN   Name=F7;
OS   Rattus norvegicus (Rat).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX   NCBI_TaxID=10116;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=Sprague-Dawley;
RA   Murphy K., Ramaker M.;
RT   "Nucleotide sequence of the cDNA encoding rat coagulation factor
RT   VII.";
RL   Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
CC   -!- FUNCTION: Initiates the extrinsic pathway of blood coagulation.
CC       Serine protease that circulates in the blood in a zymogen form.
CC       Factor VII is converted to factor VIIa by factor Xa, factor XIIa,
CC       factor IXa, or thrombin by minor proteolysis. In the presence of
CC       tissue factor and calcium ions, factor VIIa then converts factor X
CC       to factor Xa by limited proteolysis. Factor VIIa will also convert
CC       factor IX to factor IXa in the presence of tissue factor and
CC       calcium (By similarity).
CC   -!- CATALYTIC ACTIVITY: Hydrolyzes one Arg-|-Ile bond in factor X to
CC       form factor Xa.
CC   -!- SUBUNIT: Heterodimer of a light chain and a heavy chain linked by
CC       a disulfide bond (By similarity).
CC   -!- TISSUE SPECIFICITY: Plasma.
CC   -!- PTM: The vitamin K-dependent, enzymatic carboxylation of some
CC       glutamate residues allows the modified protein to bind calcium (By
CC       similarity).
CC   -!- SIMILARITY: Belongs to the peptidase S1 family.
CC   -!- SIMILARITY: Contains 2 EGF-like domains.
CC   -!- SIMILARITY: Contains 1 gamma-carboxy-glutamate domain (Gla)
CC       domain.
CC   ----------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; AF532184; AAM95967.1; -.
DR   HSSP; P08709; 1KLJ.
DR   RGD; 628678; F7.
DR   InterPro; IPR002086; Aldehyde_dehydr.
DR   InterPro; IPR000152; Asx_hydroxyl_S.
DR   InterPro; IPR000742; EGF_2.
DR   InterPro; IPR001881; EGF_Ca.
DR   InterPro; IPR001438; EGF_II.
DR   InterPro; IPR006209; EGF_like.
DR   InterPro; IPR002383; GLA_blood.
DR   InterPro; IPR001254; Peptidase_S1.
DR   InterPro; IPR001314; Peptidase_S1A.
DR   InterPro; IPR009003; Pept_Ser_Cys.
DR   InterPro; IPR000294; VitK_dep_GLA.
DR   Pfam; PF00008; EGF; 2.
DR   Pfam; PF00594; Gla; 1.
DR   Pfam; PF00089; Trypsin; 1.
DR   PRINTS; PR00722; CHYMOTRYPSIN.
DR   PRINTS; PR00010; EGFBLOOD.
DR   PRINTS; PR00001; GLABLOOD.
DR   SMART; SM00179; EGF_CA; 1.
DR   SMART; SM00069; GLA; 1.
DR   SMART; SM00020; Tryp_SPc; 1.
DR   PROSITE; PS00010; ASX_HYDROXYL; 1.
DR   PROSITE; PS00022; EGF_1; 1.
DR   PROSITE; PS01186; EGF_2; FALSE_NEG.
DR   PROSITE; PS50026; EGF_3; 1.
DR   PROSITE; PS01187; EGF_CA; 1.
DR   PROSITE; PS00011; GLA_1; 1.
DR   PROSITE; PS50998; GLA_2; 1.
DR   PROSITE; PS50240; TRYPSIN_DOM; 1.
DR   PROSITE; PS00134; TRYPSIN_HIS; 1.
DR   PROSITE; PS00135; TRYPSIN_SER; 1.
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KW   Blood coagulation; Calcium-binding; EGF-like domain;
KW   Gamma-carboxyglutamic acid; Glycoprotein; Hydrolase; Hydroxylation;
KW   Plasma; Repeat; Serine protease; Signal; Vitamin K; Zymogen.
FT   SIGNAL        1     24       Potential.
FT   PROPEP       25     41       Potential.
FT   CHAIN        42    193       Factor VII light chain (By similarity).
FT   CHAIN       194    446       Factor VII heavy chain (By similarity).
FT   DOMAIN       42     86       Gla.
FT   DOMAIN       87    123       EGF-like 1, calcium-binding (Potential).
FT   DOMAIN      128    169       EGF-like 2.
FT   DOMAIN      194    446       Serine protease.
FT   SITE        193    194       Cleavage (by factor Xa, factor XIIa,
FT                                factor IXa, or thrombin) (By similarity).
FT   ACT_SITE    234    234       By similarity.
FT   ACT_SITE    283    283       By similarity.
FT   ACT_SITE    385    385       By similarity.
FT   BINDING     379    379       Substrate (By similarity).
FT   DISULFID     58     63       By similarity.
FT   DISULFID     91    102       By similarity.
FT   DISULFID     96    111       By similarity.
FT   DISULFID    113    122       By similarity.
FT   DISULFID    132    143       By similarity.
FT   DISULFID    139    153       By similarity.
FT   DISULFID    155    168       By similarity.
FT   DISULFID    176    303       By similarity.
FT   DISULFID    200    205       By similarity.
FT   DISULFID    219    235       By similarity.
FT   DISULFID    351    370       By similarity.
FT   DISULFID    381    409       By similarity.
FT   MOD_RES      47     47       4-carboxyglutamate (By similarity).
FT   MOD_RES      48     48       4-carboxyglutamate (By similarity).
FT   MOD_RES      55     55       4-carboxyglutamate (By similarity).
FT   MOD_RES      57     57       4-carboxyglutamate (By similarity).
FT   MOD_RES      60     60       4-carboxyglutamate (By similarity).
FT   MOD_RES      61     61       4-carboxyglutamate (By similarity).
FT   MOD_RES      66     66       4-carboxyglutamate (By similarity).
FT   MOD_RES      67     67       4-carboxyglutamate (By similarity).
FT   MOD_RES      70     70       4-carboxyglutamate (By similarity).
FT   MOD_RES      76     76       4-carboxyglutamate (By similarity).
FT   MOD_RES     104    104       3-hydroxyaspartate (By similarity).
FT   CARBOHYD    186    186       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    244    244       N-linked (GlcNAc. . .) (Potential).
SQ   SEQUENCE   446 AA;  50399 MW;  292985EBF119C0AA CRC64;

  Query Match           44.5%;  Score 1541;  DB 1;  Length 446;
  Best Local Similarity   67.4%;  Pred. No. 9.7e-96;
  Matches  269;  Conservative   54;  Mismatches   76;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||: |::|   ||:|:| :::|||::||:|||  :||| ||  |||||||||:||||||:
Db         42 ANSLLEELWSSSLERECNEERCSFEEAREIFKSPERTKQFWTIYSDGDQCASNPCQNGGT 101

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              |:| |:||:|||   |||||||  :|::|||| |||| |:||| || ||||:| ||| | |
Db        102 CQDHLKSYVCFCPLDFEGRNCEKNKNEQLICANENGDCDQYCRDHVGTKRTCSCHEDYVL 161

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
                | ||| | ||||||:||::|||| |:||||||| |||||||||  :|  | | |||
Db        162 QPDEVSCKPKVEYPCGRIPVVEKRNFSRPQGRIVGGYVCPKGECPWQAVLKFNEALLCGA 221

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              |::| |:|:|||||||     |:  |||||| || :| || | | |||:|: |  | |:
Db        222 VLLDTRWIVTAAHCFDKFGKLVNITVVLGEHDFSEKEGTEQVRLVEQVIMPNKYTRGRTD 281

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              |||||:|||:||  ||:|||||||||| ||| ||| :||| ||||||||||||||||||:
Db        282 HDIALVRLHRPVTFTDYVVPLCLPERAFSENTLASIRFSRVSGWGQLLDRGATALELMVI 341

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||: ::   ::| ||| |||||| ||:||:|||||||||||||| |||||||
Db        342 EVPRLMTQDCLEHAKHSANTPRITENMFCAGYMDGTKDACKGDSGGPHATHYHGTWYLTG 401

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGV 399
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              :||||:||| :|| |||||||||:|| | | |: | |:
Db        402 VVSWGEGCAAIGHIGVYTRVSQYIDWLVKYMDSKLRVGI 440


RESULT 7
Q7Z351
ID   Q7Z351      PRELIMINARY;      PRT;   482 AA.
AC   Q7Z351;
DT   01-OCT-2003 (TrEMBLrel. 25, Created)
DT   01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   Hypothetical protein DKFZp686N02209.
GN   Name=DKFZp686N02209;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Human rectum tumor;
RA   Bloecker H., Boecher M., Mewes H.W., Weil B., Amid C., Osanger A.,
RA   Fobo G., Han M., Wiemann S.;
RL   Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BX538118; CAD98026.1; -.
DR   HSSP; P01857; 1HZH.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   482 AA;  52852 MW;  EDA75F1901D1A034 CRC64;

  Query Match           36.7%;  Score 1272.5;  DB 2;  Length 482;
  Best Local Similarity   53.1%;  Pred. No. 1.4e-77;
  Matches  286;  Conservative   26;  Mismatches  104;  Indels  123;  Gaps   15;

Qy        150 QGRIV--GGKVCPKGECPWQVLLLVNGAQLCGGTLINTIWVVSAAHCFDKIK----NWRN 203
              | ::|  || |   |    ::  : :|    |           || |   :|      |
Db         20 QAQVVESGGSVVQPGR-SLRLSCIASGFSFSG----------SAMHWLRQIPGKGLEWVA 68

Qy        204 LIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPG----TTNHDIALLRLH-QPVVLTDHV 258
              :|:  | | |                 | | |    : ::  :|| ||   :   |
Db         69 VISYDGNHKLY----------------SDSVKGRFTISRDNSKSLLFLHVNSLTSADTA 111

Qy        259 VPLCLPERTFSERTLA-------FVRFSLVSGWGQLLDRGATALELMVLNVPRLMTQDCL 311
              :  |   | |  :|  :       :  :| :  ||    || | :
Db        112 IYYC--ARDFHSKTTSIFGLIPLYFYYSAMDTWG----RGTTVIV--------------- 150

Qy        312 QQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG---------- 360
                                    | | || |  | |   : |   |
Db        151 ----------------------SSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFP 186

Qy        361 ---IVSWGQGCATVG---------HFGVY------TRVSQYIEWLQKLMRSEPRPGVLLR 402
                  |||  |  | |          |:|       | |  :     :   :|
Db        187 EPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPS---N 243

Qy        403 APFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSH 462
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 TKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSH 303

Qy        463 EDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL 522
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 EDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL 363

Qy        523 PAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPE 582
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 PAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPE 423

Qy        583 NNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
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                 |||||||||||||||||||||||||||||||||||||||||||| ||||||||||||||||
Db        424 NNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEGLHNHYTQKSLSLSPGK 482


RESULT 8
Q6P055
ID   Q6P055      PRELIMINARY;      PRT;   473 AA.
AC   Q6P055;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Peripheral Nervous System;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Peripheral Nervous System;
RA   Strausberg R.;
RL   Submitted (JAN-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC065820; AAH65820.1; -.
DR   HSSP; P01861; 1ADQ.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   473 AA;  51344 MW;  9816D56A77129B57 CRC64;

  Query Match             36.7%;  Score 1271;  DB 2;  Length 473;
  Best Local Similarity   66.5%;  Pred. No. 1.7e-77;
  Matches  260;  Conservative   10;  Mismatches   57;  Indels   64;  Gaps    7;

Qy        298 MVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCA------------GYSDG-----SKDS 339
              : | :  | |:|              | : |||             :  |     |  |
Db        100 LYLQMSDLRTED-------------TAFYFCATGSMNTVGLTGFDSWGQGTLVTVSSAS 145

Qy        340 CKGDSGGPHATHYRGTWYLTG-------------IVSWGQGCATVG---------HFGV 376
               || |  | |   : |   |               |||  |  | |           |:
Db        146 TKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL 205

Qy        377 Y------TRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTCPPCPAPELLG 430
              |      | |  :    :    :|             ||||||||||||||||||||
Db        206 YSLSSVVTVPSSSLGTQTYICNVNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELLG 262

Qy        431 GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQY 490
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        263 GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQY 322

Qy        491 NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRD 550
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        323 NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRD 382

Qy        551 ELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSR 610
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        383 ELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSR 442

Qy        611 WQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||||||||||||| ||||||||||||||||
Db        443 WQQGNVFSCSVMHEGLHNHYTQKSLSLSPGK 473


RESULT 9
Q7Z7P5
ID   Q7Z7P5      PRELIMINARY;      PRT;   469 AA.
AC   Q7Z7P5;
DT   01-OCT-2003 (TrEMBLrel. 25, Created)
DT   01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   IGHG1 protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RA   Strausberg R.;
RL   Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC051328; AAH51328.1; -.
DR   HSSP; P01857; 1HZH.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
SQ   SEQUENCE   469 AA;  51395 MW;  C8D5BE12BAAF795C CRC64;
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  Query Match             36.7%;  Score 1270.5;  DB 2;  Length 469;
  Best Local Similarity   70.8%;  Pred. No. 1.8e-77;
  Matches  257;  Conservative    6;  Mismatches   52;  Indels   48;  Gaps    5;

Qy        324 TEYMFCAGYSDG----------------SKDSCKGDSGGPHATHYRGTWYLTG------- 360
              |   :||  | |                  |  | || |  | |   : |   |
Db        110 TALFYCATKSRGQVGDFDSWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVK 169

Qy        361 -------IVSWGQGCATVG---------HFGVY------TRVSQYIEWLQKLMRSEPRPG 398
                    |||  |  | |           |:|      | |  :     :     :|
Db        170 DYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPS 229

Qy        399 VLLRAPFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVV 458
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        230 ---NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVV 286

Qy        459 DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVS 518
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        287 DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVS 346

Qy        519 NKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESN 578
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        347 NKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESN 406

Qy        579 GQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLS 638
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        407 GQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLS 466

Qy        639 PGK 641
              |||
Db        467 PGK 469
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```
RESULT 10
Q6GMX6
ID   Q6GMX6      PRELIMINARY;      PRT;   465 AA.
AC   Q6GMX6;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Primary B-Cells;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Primary B-Cells;
RA   Strausberg R.;
RL   Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC073766; AAH73766.1; -.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   Pfam; PF00047; ig; 4.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   465 AA;  51083 MW;  B3A9B7D0FDB1386E CRC64;
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  Query Match             36.6%;  Score 1269.5;  DB 2;  Length 465;
  Best Local Similarity   62.7%;  Pred. No. 2.1e-77;
  Matches  269;  Conservative   21;  Mismatches   84;  Indels   55;  Gaps   10;

Qy        234 YVPGTTNHDIAL-LRLHQPVVLTDHVVPLCLPERTFSERTLAFV---RFSLVSGWGQLLD 289
              |  |:||:: :|  |:   |  : :   | |   | ::  : :    ||:    |||
Db         71 YTSGSTNYNPSLKSRVTMSVDTSKNQFSLKLSSVTAADTAVYYCARGRFTYFDYWGQ--- 127

Qy        290 RGATALELMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHA 349
              |      :: |   |:           |::          | |  ||| |
Db        128 -GT------LVTVSSASTK----------GPSVFPL----------APSSKSTSGGTAA 159

Qy        350 THYRGTWYLTG--IVSWGQGCATVG---------HFGVY------TRVSQYIEWLQKLMR 392
                    |      |||  |  | |           |:|      | |  :     :
Db        160 LGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICN 219

Qy        393 SEPRPGVLLRAPFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE 452
              :|           ||||||||||||||||||||||||||||||||||||||||||||||
Db        220 VNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE 276

Qy        453 VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE 512
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        277 VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE 336

Qy        513 YKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 572
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        337 YKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 396

Qy        573 VEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQ 632
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        397 VEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQ 456

Qy        633 KSLSLSPGK 641
              |||||||||
Db        457 KSLSLSPGK 465
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RESULT 11
GC1_HUMAN
ID   GC1_HUMAN      STANDARD;      PRT;   330 AA.
AC   P01857;
DT   21-JUL-1986 (Rel. 01, Created)
DT   21-JUL-1986 (Rel. 01, Last sequence update)
DT   25-OCT-2004 (Rel. 45, Last annotation update)
DE   Ig gamma-1 chain C region.
GN   Name=IGHG1;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=82274238; PubMed=6287432;
RA   Ellison J.W., Berson B.J., Hood L.E.;
RT   "The nucleotide sequence of a human immunoglobulin C gamma1 gene.";
```

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RL   Nucleic Acids Res. 10:4071-4079(1982).
RN   [2]
RP   SEQUENCE OF 1-135 (MYELOMA PROTEIN EU).
RX   MEDLINE=71064024; PubMed=5489771;
RA   Cunningham B.A., Rutishauser U., Gall W.E., Gottlieb P.D.,
RA   Waxdal M.J., Edelman G.M.;
RT   "The covalent structure of a human gamma G-immunoglobulin. VII. Amino
RT   acid sequence of heavy-chain cyanogen bromide fragments H1-H4.";
RL   Biochemistry 9:3161-3170(1970).
RN   [3]
RP   SEQUENCE OF 136-329 (EU).
RX   MEDLINE=71064025; PubMed=5530842;
RA   Rutishauser U., Cunningham B.A., Bennett C., Konigsberg W.H.,
RA   Edelman G.M.;
RT   "The covalent structure of a human gamma G-immunoglobulin. 8. Amino
RT   acid sequence of heavy-chain cyanogen bromide fragments H5-H7.";
RL   Biochemistry 9:3171-3181(1970).
RN   [4]
RP   SEQUENCE (MYELOMA PROTEIN NIE).
RX   MEDLINE=77070269; PubMed=826475;
RA   Ponstingl H., Hilschmann N.;
RT   "The rule of antibody structure. The primary structure of a monoclonal
RT   IgG1 immunoglobulin (myeloma protein Nie). III. The chymotryptic
RT   peptides of the H-chain, alignment of the tryptic peptides and
RT   discussion of the complete structure.";
RL   Hoppe-Seyler's Z. Physiol. Chem. 357:1571-1604(1976).
RN   [5]
RP   SEQUENCE (MYELOMA PROTEIN KOL), AND DISULFIDE BONDS.
RX   MEDLINE=83289131; PubMed=6884994;
RA   Schmidt W.E., Jung H.-D., Palm W., Hilschmann N.;
RT   "Three-dimensional structure determination of antibodies. Primary
RT   structure of crystallized monoclonal immunoglobulin IgG1 KOL, I.";
RL   Hoppe-Seyler's Z. Physiol. Chem. 364:713-747(1983).
RN   [6]
RP   DISULFIDE BONDS.
RX   MEDLINE=71064027; PubMed=4923144;
RA   Gall W.E., Edelman G.M.;
RT   "The covalent structure of a human gamma G-immunoglobulin. X.
RT   Intrachain disulfide bonds.";
RL   Biochemistry 9:3188-3196(1970).
RN   [7]
RP   DISULFIDE BONDS.
RX   MEDLINE=77070267; PubMed=1002129;
RA   Dreker L., Schwarz J., Reichel W., Hilschmann N.;
RT   "Rule of antibody structure. The primary structure of a monoclonal
RT   IgG1 immunoglobulin (myeloma protein Nie), I: purification and
RT   characterization of the protein, the L- and H-chains, the cyanogen
RT   bromide cleavage products, and the disulfide bridges.";
RL   Hoppe-Seyler's Z. Physiol. Chem. 357:1515-1540(1976).
RN   [8]
RP   X-RAY CRYSTALLOGRAPHY (2.9 ANGSTROMS).
RX   MEDLINE=81208100; PubMed=7236608;
RA   Deisenhofer J.;
RT   "Crystallographic refinement and atomic models of a human Fc fragment
RT   and its complex with fragment B of protein A from Staphylococcus
RT   aureus at 2.9- and 2.8-A resolution.";
RL   Biochemistry 20:2361-2370(1981).
CC   -!- MISCELLANEOUS: Nie has the G1M(17) allotypic marker, 97-K, and the
CC       G1M(1) markers, 239-D and 241-L. KOL and EU sequences have the
CC       G1M(3) marker and the G1M (non-1) markers.
CC   -!- MISCELLANEOUS: Nie also differs in the amidation states of 35,
CC       116, 198, 269 and 272.
CC   -!- MISCELLANEOUS: EU also differs in the amidation states of residues
CC       155, 166, 177, 195, 198, 269, and 272 and in the order of residues
CC       268-272.
CC   -!- MISCELLANEOUS: KOL also differs in the amidation states of
CC       residues 198, 267 and 272.
CC   ----------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
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CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; J00228; AAC82527.1; ALT_INIT.
DR   PIR; A93433; GHHU.
DR   PDB; 1AJ7; X-ray; H=1-103.
DR   PDB; 1D5B; X-ray; B/H=1-101.
DR   PDB; 1D5I; X-ray; H=1-101.
DR   PDB; 1D6V; X-ray; H=1-101.
DR   PDB; 1DN2; X-ray; A/B=120-326.
DR   PDB; 1E4K; X-ray; A/B=106-329.
DR   PDB; 1FC1; X-ray; A/B=106-329.
DR   PDB; 1FC2; X-ray; D=106-329.
DR   PDB; 1FCC; X-ray; A=121-326.
DR   PDB; 1HZH; X-ray; H/K=1-330.
DR   PDB; 1I7Z; X-ray; B/D=1-103.
DR   PDB; 1IIS; X-ray; A/B=107-330.
DR   PDB; 1IIX; X-ray; A/B=107-330.
DR   PDB; 1L6X; X-ray; A=120-326.
DR   PDB; 1OQX; X-ray; A/B=119-330.
DR   PDB; 2RCS; X-ray; H=1-103.
DR   Genew; HGNC:5525; IGHG1.
DR   MIM; 147100; -.
DR   GO; GO:0005624; C:membrane fraction; NAS.
DR   GO; GO:0003823; F:antigen binding; TAS.
DR   GO; GO:0006955; P:immune response; NAS.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003006; Ig_MHC.
DR   Pfam; PF00047; ig; 3.
DR   PROSITE; PS50835; IG_LIKE; 3.
DR   PROSITE; PS00290; IG_MHC; 2.
KW   3D-structure; Direct protein sequencing; Glycoprotein;
KW   Immunoglobulin C region; Immunoglobulin domain.
FT   NON_TER       1      1
FT   DOMAIN        1     98       CH1.
FT   DOMAIN       99    110       Hinge.
FT   DOMAIN      111    223       CH2.
FT   DOMAIN      224    330       CH3.
FT   DISULFID     27     83
FT   DISULFID    103    103       Interchain (with light chain).
FT   DISULFID    109    109       Interchain (with heavy chain).
FT   DISULFID    112    112       Interchain (with heavy chain).
FT   DISULFID    144    204
FT   DISULFID    250    308
FT   CARBOHYD    180    180       N-linked (GlcNAc. . .).
FT   VARIANT      97     97       K -> R (in G1M(3) marker).
FT                                /FTId=VAR_003886.
FT   VARIANT     239    239       D -> E (in G1M(non-1) marker).
FT                                /FTId=VAR_003887.
FT   VARIANT     241    241       L -> M (in G1M(non-1) marker).
FT                                /FTId=VAR_003888.
FT   STRAND       23     24
FT   STRAND       26     33
FT   STRAND       38     38
FT   STRAND       41     41
FT   TURN         42     45
FT   TURN         48     49
FT   STRAND       50     52
FT   STRAND       57     58
FT   TURN         59     61
FT   STRAND       62     71
FT   HELIX        73     75
FT   TURN         76     78
FT   STRAND       82     87
FT   TURN         88     91
FT   STRAND       92     97
FT   TURN        102    103
FT   STRAND      122    126
FT   HELIX       130    134
FT   TURN        136    137
FT   STRAND      141    149
FT   STRAND      157    162
FT   TURN        163    164
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FT   STRAND      165    167
FT   STRAND      171    172
FT   STRAND      176    177
FT   TURN        179    180
FT   STRAND      183    190
FT   HELIX       193    197
FT   TURN        198    199
FT   STRAND      202    207
FT   TURN        209    210
FT   STRAND      215    219
FT   STRAND      227    227
FT   STRAND      230    234
FT   HELIX       238    242
FT   STRAND      245    256
FT   STRAND      261    266
FT   TURN        267    268
FT   STRAND      269    270
FT   STRAND      274    276
FT   STRAND      280    281
FT   TURN        283    284
FT   STRAND      287    296
FT   HELIX       297    301
FT   TURN        302    303
FT   STRAND      306    311
FT   TURN        313    314
FT   HELIX       316    318
FT   STRAND      319    324
SQ   SEQUENCE   330 AA;  36106 MW;  3770EE106C2FA33D CRC64;

  Query Match             36.5%;  Score 1265;  DB 1;  Length 330;
  Best Local Similarity   78.1%;  Pred. No. 2.8e-77;
  Matches  250;  Conservative    4;  Mismatches   46;  Indels   20;  Gaps    4;

Qy        339 SCKGDSGGPHATHYRGTWYLTG--IVSWGQGCATVG---------HFGVY------TRVS 381
              | |  |||  |       |       |||  |  | |           |:|      |  |
Db         14 SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPS 73

Qy        382 QYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 441
                :    :    :|            ||||||||||||||||||||||||||||||||
Db         74 SSLGTQTYICNVNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 130

Qy        442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        131 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 190

Qy        502 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 561
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        191 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 250

Qy        562 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 621
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        251 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 310

Qy        622 MHEALHNHYTQKSLSLSPGK 641
              ||||||||||||||||||||
Db        311 MHEALHNHYTQKSLSLSPGK 330


RESULT 12
Q6PJA4
ID   Q6PJA4      PRELIMINARY;      PRT;   470 AA.
AC   Q6PJA4;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Primary B-Cells;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Primary B-Cells;
RA   Strausberg R.;
RL   Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC018747; AAH18747.1; -.
DR   HSSP; P01861; 1ADQ.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   470 AA;  51715 MW;  7B49556A11FD7D99 CRC64;

  Query Match             36.5%;  Score 1265;  DB 2;  Length 470;
  Best Local Similarity   78.1%;  Pred. No. 4.3e-77;
  Matches  250;  Conservative    4;  Mismatches   46;  Indels   20;  Gaps    4;

Qy        339 SCKGDSGGPHATHYRGTWYLTG--IVSWGQGCATVG---------HFGVY------TRVS 381
              | |  |||  |       |       |||  |  | |           |:|      |  |
Db        154 SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPS 213

Qy        382 QYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 441
                :    :    :|            ||||||||||||||||||||||||||||||||
Db        214 SSLGTQTYICNVNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 270

Qy        442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 330

Qy        502 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 561
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 390

Qy        562 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 621
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 450

Qy        622 MHEALHNHYTQKSLSLSPGK 641
              ||||||||||||||||||||
Db        451 MHEALHNHYTQKSLSLSPGK 470


RESULT 13
Q7Z5W1
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ID   Q7Z5W1      PRELIMINARY;      PRT;   470 AA.
AC   Q7Z5W1;
DT   01-OCT-2003 (TrEMBLrel. 25, Created)
DT   01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RA   Strausberg R.;
RL   Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC053984; AAH53984.1; -.
DR   HSSP; P01857; 1HZH.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   470 AA;  51204 MW;  778CF34521483E1A CRC64;

  Query Match             36.5%;  Score 1265;  DB 2;  Length 470;
  Best Local Similarity   78.1%;  Pred. No. 4.3e-77;
  Matches  250;  Conservative    4;  Mismatches   46;  Indels   20;  Gaps    4;

Qy        339 SCKGDSGGPHATHYRGTWYLTG--IVSWGQGCATVG---------HFGVY------TRVS 381
              | |  ||| |       |      ||| |  | |           |:|      |  |
Db        154 SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPS 213

Qy        382 QYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 441
                :    :    :|           ||||||||||||||||||||||||||||||
Db        214 SSLGTQTYICNVNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 270

Qy        442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 330

Qy        502 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 561
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 390

Qy        562 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 621
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 450

Qy        622 MHEALHNHYTQKSLSLSPGK 641
              ||||||||||||||||||||
Db        451 MHEALHNHYTQKSLSLSPGK 470


RESULT 14
Q6GMW7
ID   Q6GMW7      PRELIMINARY;      PRT;   475 AA.
AC   Q6GMW7;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RA   Strausberg R.;
RL   Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC073782; AAH73782.1; -.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   Pfam; PF00047; ig; 4.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   475 AA;  51987 MW;  2A1FE55D736860F8 CRC64;

  Query Match             36.5%;  Score 1265;  DB 2;  Length 475;
  Best Local Similarity   78.1%;  Pred. No. 4.4e-77;
  Matches  250;  Conservative    4;  Mismatches   46;  Indels   20;  Gaps    4;

Qy        339 SCKGDSGGPHATHYRGTWYLTG--IVSWGQGCATVG---------HFGVY------TRVS 381
              | |  ||| |       |      ||| |  | |           |:|      |  |
Db        159 SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPS 218
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Qy        382 QYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 441
              :    :    :|            ||||||||||||||||||||||||||||||||||||
Db        219 SSLGTQTYICNVNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 275

Qy        442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 335

Qy        502 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 561
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 395

Qy        562 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 621
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 455

Qy        622 MHEALHNHYTQKSLSLSPGK 641
              ||||||||||||||||||||
Db        456 MHEALHNHYTQKSLSLSPGK 475
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RESULT 15
Q6GMX1
ID   Q6GMX1      PRELIMINARY;      PRT;   476 AA.
AC   Q6GMX1;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RA   Strausberg R.;
RL   Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC073773; AAH73773.1; -.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   Pfam; PF00047; ig; 4.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   476 AA;  52286 MW;  622AABA5C62DDE9D CRC64;

  Query Match           36.5%;  Score 1265;  DB 2;  Length 476;
  Best Local Similarity  78.1%;  Pred. No. 4.4e-77;
  Matches  250;  Conservative    4;  Mismatches   46;  Indels   20;  Gaps    4;

Qy        339 SCKGDSGGPHATHYRGTWYLTG--IVSWGQGCATVG---------HFGVY------TRVS 381
              | |  ||| |      |      |||  | | |           |:|      | |
Db        160 SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPS 219

Qy        382 QYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 441
              :    :    :|            ||||||||||||||||||||||||||||||||||||
Db        220 SSLGTQTYICNVNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 276

Qy        442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        277 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 336

Qy        502 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 561
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        337 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 396

Qy        562 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 621
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        397 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 456

Qy        622 MHEALHNHYTQKSLSLSPGK 641
              ||||||||||||||||||||
Db        457 MHEALHNHYTQKSLSLSPGK 476
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Search completed: February 10, 2005, 05:46:11
Job time : 95.2497 secs
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OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 26.433 Seconds
(without alignments)
2333.257 Million cell updates/sec

Title: US-10-617-619A-8
Perfect score: 3464
Sequence: 1 ANAFLXXLRPGSLXRXCKXX.....MHEALHNHYTQKSLSLSPGK 641

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	2187	63.1	466	1	KFHU7	coagulation factor
2	1621	46.8	443	2	I46932	coagulation factor
3	1586	45.8	407	1	KFBO7	coagulation factor
4	1270	36.7	374	2	S69339	Ig heavy chain V r
5	1265	36.5	330	1	GHHU	Ig gamma-1 chain C
6	1255	36.2	255	4	S31866	Ig gamma-1 chain C
7	1210	34.9	234	2	PT0207	Ig gamma chain C r
8	1184	34.2	377	2	A23511	Ig gamma-3 chain C
9	1182	34.1	377	2	A60764	Ig gamma-3 chain C
10	1159	33.5	289	1	G3HUWI	Ig gamma-3 heavy c
11	1150	33.2	326	1	G2HU	Ig gamma-2 chain C
12	1142.5	33.0	327	1	G4HU	Ig gamma-4 chain C
13	929	26.8	323	1	GHRB	Ig gamma chain C r
14	914.5	26.4	328	2	I47160	Ig gamma 2b chain
15	912.5	26.3	328	2	I47159	Ig gamma 2a chain
16	907.5	26.2	329	1	G2GP	Ig gamma-2 chain C
17	903	26.1	277	2	I47162	Ig gamma 4 chain c
18	892	25.8	328	2	I47158	Ig gamma 1 chain c
19	884.5	25.5	328	2	I47161	Ig gamma 3 chain c
20	879.5	25.4	492	1	EXBO	coagulation factor
21	878.5	25.4	475	1	EXCH	coagulation factor
22	878.5	25.4	488	1	EXHU	coagulation factor
23	867.5	25.0	416	1	KFBO	coagulation factor
24	867	25.0	461	1	KFHU	coagulation factor
25	864.5	25.0	470	2	S22080	Ig heavy chain pre
26	853.5	24.6	472	2	S31459	Ig gamma-1 chain -
27	853	24.6	308	2	C30554	Ig heavy chain C r
28	852	24.6	329	1	G3MSC	Ig gamma-3 chain C
29	851.5	24.6	482	1	EXRT	coagulation factor
30	848.5	24.5	333	2	PS0018	Ig gamma-2b chain
31	842.5	24.3	459	2	JQ0419	coagulation factor
32	841	24.3	398	1	G3MSM	Ig gamma-3 chain C
33	838.5	24.2	452	1	A30351	coagulation factor
34	838	24.2	444	2	PC4436	monoclonal antibod
35	837	24.2	324	1	G1MS	Ig gamma-1 chain C
36	836	24.1	326	2	PS0017	Ig gamma-1 chain C
37	832	24.0	393	1	G1MSM	Ig gamma-1 chain C
38	818.5	23.6	329	2	S00847	Ig gamma-2c chain
39	814.5	23.5	330	1	G2MSA	Ig gamma-2a chain
40	814.5	23.5	469	2	S37483	Ig gamma-2a chain
41	812.5	23.5	335	1	G2MSAB	Ig gamma-2a chain
42	809.5	23.4	399	1	G2MSAM	Ig gamma-2a chain
43	804	23.2	446	2	S40295	Ig gamma-2a chain
44	795	23.0	322	2	PS0019	Ig gamma-2a chain
45	795	23.0	461	1	S18994	protein C (activat

ALIGNMENTS

RESULT 1
KFHU7
coagulation factor VIIa (EC 3.4.21.21) precursor [validated] - human
C;Species: Homo sapiens (man)
C;Date: 19-May-1989 #sequence_revision 19-May-1994 #text_change 09-Jul-2004
C;Accession: A28322; A23819; A31186; B31186; S63524
R;O'Hara, P.J.; Grant, F.J.; Haldeman, B.A.; Gray, C.L.; Insley, M.Y.; Hagen, F.S.; Mur
Proc. Natl. Acad. Sci. U.S.A. 84, 5158-5162, 1987
A;Title: Nucleotide sequence of the gene coding for human factor VII, a vitamin K-depen
A;Reference number: A28322; MUID:87260948; PMID:3037537
A;Accession: A28322
A;Molecule type: DNA
A;Residues: 1-466 <OHA>
A;Cross-references: UNIPROT:P08709; GB:J02933; NID:g180333; PIDN:AAA51983.1; PID:g18033
R;Hagen, F.S.; Gray, C.L.; O'Hara, P.; Grant, F.J.; Saari, G.C.; Woodbury, R.G.; Hart,
Proc. Natl. Acad. Sci. U.S.A. 83, 2412-2416, 1986
A;Title: Characterization of a cDNA coding for human factor VII.
A;Reference number: A23819; MUID:86205965; PMID:3486420
A;Accession: A23819
A;Molecule type: mRNA
A;Residues: 1-466 <HAG>
A;Cross-references: GB:M13232; NID:g182799; PIDN:AAA88040.1; PID:g182801
R;Thim, L.; Bjoern, S.; Christensen, M.; Nicolaisen, E.M.; Lund-Hansen, T.; Pedersen, A
Biochemistry 27, 7785-7793, 1988
A;Title: Amino acid sequence and posttranslational modifications of human factor VII-a
A;Reference number: A90539; MUID:89088153; PMID:3264725
A;Accession: A31186
A;Molecule type: protein
A;Residues: 61-212 <THI>
A;Accession: B31186
A;Molecule type: protein
A;Residues: 213-466 <TH2>
R;Bjoern, S.; Foster, D.C.; Thim, L.; Wiberg, F.C.; Christensen, M.; Komiyama, Y.; Pede
J. Biol. Chem. 266, 11051-11057, 1991
A;Title: Human plasma and recombinant factor VII. Characterization of O-glycosylations
A;Reference number: A40529; MUID:91250411; PMID:1904059
A;Contents: annotation; carbohydrate binding sites
R;Persson, E.; Petersen, L.C.
Eur. J. Biochem. 234, 293-300, 1995
A;Title: Structurally and functionally distinct Ca(2+) binding sites in the gamma-carbo
A;Reference number: S63524; MUID:96096752; PMID:8529655
A;Accession: S63524
A;Molecule type: protein
A;Residues: 61-65;99-103;105-109;213-217;308-312 <PER>
C;Genetics:
A;Gene: GDB:F7
A;Cross-references: GDB:119897; OMIM:227500
A;Map position: 13q34-13q34
A;Introns: 22/1; 44/1; 97/3; 106/1; 144/1; 191/1; 227/3; 269/1
C;Function:
A;Description: catalyzes the proteolytic activation of coagulation factor X in the pres
oagulation factor IX in the presence of calcium and tissue factor

```
A;Pathway: blood coagulation extrinsic pathway
C;Superfamily: coagulation factor X; EGF homology; Gla domain homology; trypsin homology
C;Keywords: beta-hydroxyaspartic acid; blood coagulation; calcium binding; carboxyglutam
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-60/Domain: propeptide #status predicted <PRO>
F;45-104/Domain: Gla domain homology <GLA>
F;61-212/Product: coagulation factor VIIa light chain #status experimental <MA1>
F;110-141/Domain: EGF homology <EG1>
F;151-187/Domain: EGF homology <EG2>
F;213-466/Product: coagulation factor VIIa heavy chain #status experimental <MA2>
F;213-447/Domain: trypsin homology <TRY>
F;66,67,74,76,79,80,85,86,89,95/Modified site: gamma-carboxyglutamic acid (Glu) #status
F;77-82,110-121,115-130,132-141,151-162,158-172,174-187,195-322,219-224,238-254,370-389,
F;112,120/Binding site: carbohydrate (Ser) (covalent) #status experimental
F;123/Modified site: erythro-beta-hydroxyaspartic acid (Asp) #status absent
F;205,382/Binding site: carbohydrate (Asn) (covalent) #status experimental
F;212-213/Cleavage site: Arg-Ile (coagulation factor XIIa) #status experimental
F;253,302,404/Active site: His, Asp, Ser #status predicted
F;350-351/Cleavage site: Arg-Gly (coagulation factor Xa) #status predicted

  Query Match             63.1%;  Score 2187;  DB 1;  Length 466;
  Best Local Similarity   97.5%;  Pred. No. 2.1e-124;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||||:|:||::||:|||||:|||||||||||||||||||||||||||||
Db         61 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 120

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 180

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 240

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 300

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 360

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 420

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        421 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 466


RESULT 2
I46932
coagulation factor VII - rabbit
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 04-Sep-1997 #sequence_revision 04-Sep-1997 #text_change 12-Feb-1999
C;Accession: I46932
R;Brothers, A.B.; Clarke, B.J.; Sheffield, W.P.; Blajchman, M.A.
Thromb. Res. 69, 231-238, 1993
A;Title: Complete nucleotide sequence of the cDNA encoding rabbit coagulation factor VII
A;Reference number: I46932; MUID:93190306; PMID:8383365
A;Accession: I46932
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-443 <BRO>
A;Cross-references: GB:S56300; NID:g266294; PID:g266295
C;Superfamily: coagulation factor X; EGF homology; Gla domain homology; trypsin homology
F;24-83/Domain: Gla domain homology <GLA>
F;89-120/Domain: EGF homology <EG1>
F;130-166/Domain: EGF homology <EG2>
F;192-425/Domain: trypsin homology <TRY>

  Query Match             46.8%;  Score 1621;  DB 2;  Length 443;
  Best Local Similarity   71.4%;  Pred. No. 2.3e-90;
  Matches  290;  Conservative   52;  Mismatches   62;  Indels    2;  Gaps    2;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||:||::|||||:|:||:: |||::||::|:  :||| |||:|:|||||||:|||||||
Db         40 ANSFLEELRPGSLERECKEELCSFEEAREVFQSTERTKQFWITYNDGDQCASNPCQNGGS 99

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              |:||:|||||||  |||||| :|:|||||: ||||||||||| |::|||||||:|
Db        100 CEDQIQSYICFCLADFEGRNCEKNKNDQLICMYENGGCEQYCSDHVGSQRSCRCHEGYTL 159

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              | :|||||||:|||||:| |||| || ||||||||||||||||||  |:     ||||
Db        160 LPNGVSCTPTVDYPCGKVPALEKRGASNPQGRIVGGKVCPKGECPWQAALMNGSTLLCGG 219

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              :|::| ||||||||||: : |||  ||||||||||:|||| | |||:|:|  |||| |:
Db        220 SLLDTHWVVSAAHCFDKLSSLRNLTIVLGEHDLSEHEGDEQVRHVAQLIMPDKYVPGKTD 279

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              |||||||| ||  ||::|||||||||| ||| ||| :||| |||||||| ||| | ||| :
Db        280 HDIALLRLLQPAALTNNVVPLCLPERNFSESTLATIRFSRVSGWGQLLYRGALARELMAI 339

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              :|||||||||::||     || :|  |||||| ||||:|||||||||||| | || ||||
Db        340 DVPRLMTQDCVEQSEHNPGSPEVTGNMFCAGYLDGSKDACKGDSGGPHATSYHGT-YLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              :||||:||| ||| |||||||:  ||| :||||:   |:  | |||
Db        399 VVSWGEGCARVGHVGVYTRVSRDTEWLSRLMRSKLHHGI-QRHPFP 443


RESULT 3
KFBO7
coagulation factor VIIa (EC 3.4.21.21) - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 21-May-1990 #sequence_revision 23-Mar-1995 #text_change 09-Jul-2004
C;Accession: A31979; C20274
R;Takeya, H.; Kawabata, S.; Nakagawa, K.; Yamamichi, Y.; Miyata, T.; Iwanaga, S.
J. Biol. Chem. 263, 14868-14877, 1988
A;Title: Bovine factor VII. Its purification and complete amino acid sequence.
A;Reference number: A31979; MUID:89008362; PMID:3049594
A;Accession: A31979
A;Molecule type: protein
A;Residues: 1-407 <TAK>
A;Cross-references: UNIPROT:P22457
R;McMullen, B.A.; Fujikawa, K.; Kisiel, W.
Biochem. Biophys. Res. Commun. 115, 8-14, 1983
A;Title: The occurrence of beta-hydroxyaspartic acid in the vitamin K-dependent blood cc
A;Reference number: A20274; MUID:83308813; PMID:6688526
A;Accession: C20274
A;Molecule type: protein
A;Residues: 58-62,'X',64-68 <MCM>
A;Note: the residue designated 'X' was determined to be hydroxyaspartic acid
R;Hase, S.; Kawabata, S.; Nishimura, H.; Takeya, H.; Sueyoshi, T.; Miyata, T.; Iwanaga,
J. Biochem. 104, 867-868, 1988
A;Title: A new trisaccharide sugar chain linked to a serine residue in bovine blood coag
A;Reference number: A44556; MUID:89213999; PMID:3149637
A;Contents: annotation
A;Note: structure and location of covalently bound carbohydrate
C;Function:
A;Description: catalyzes the proteolytic activation of coagulation factor X in the prese
gulation factor IX in the presence of calcium and tissue factor
A;Pathway: blood coagulation extrinsic pathway
C;Superfamily: coagulation factor X; EGF homology; Gla domain homology; trypsin homology
C;Keywords: beta-hydroxyaspartic acid; blood coagulation; calcium binding; carboxyglutam
F;1-152/Product: coagulation factor VIIa light chain #status experimental <MA1>
F;1-44/Domain: Gla domain homology (fragment) <GLA>
F;50-81/Domain: EGF homology <EG1>
F;91-127/Domain: EGF homology <EG2>
F;153-407/Product: coagulation factor VIIa heavy chain #status experimental <MA2>
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```
F;153-387/Domain: trypsin homology <TRY>
F;6,7,14,16,19,20,25,26,29,34,35/Modified site: gamma-carboxyglutamic acid (Glu) #status
F;17-22,50-61,55-70,72-81,91-102,98-112,114-127,135-262,159-164,178-194,310-329,340-368/
F;52/Binding site: carbohydrate (Ser) (covalent) #status experimental
F;63/Modified site: erythro-beta-hydroxyaspartic acid (Asp) (partial) #status experiment
F;145,203/Binding site: carbohydrate (Asn) (covalent) #status experimental
F;152-153/Cleavage site: Arg-Ile (coagulation factor XIIa) #status experimental
F;193,242,344/Active site: His, Asp, Ser #status predicted
F;290-291/Cleavage site: Arg-Gly (coagulation factor Xa) #status experimental

  Query Match             45.8%;  Score 1586;  DB 1;  Length 407;
  Best Local Similarity   69.6%;  Pred. No. 2.6e-88;
  Matches  275;  Conservative   55;  Mismatches   65;  Indels    0;  Gaps    0;

Qy          1 ANAPLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              || ||::| ||||:|:|::: |||::| :||:: :||: ||:||:|||||||||||||||
Db          1 ANGFLEELLPGSLERECREELCSFEEAHEIFRNEERTRQFWVSYNDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              |:|||:|||||   |||||||| |  |||| |:||||||||    |  | | |||||:|
Db         61 CEDQLRSYICFCPDGFEGRNCETDKQSQLICANDNGGCEQYCGADPGAGRFCWCHEGYAL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              |||||| ||||||||||:|||| |||||||||| |||||||||| :| :||| ||||
Db        121 QADGVSCAPTVEYPCGKIPVLEKRNGSKPQGRIVGGHVCPKGECPWQAMLKLNGALLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||:   |||||||||:::::  || |||||||||  :| || |||||:|:|  |||| |:
Db        181 TLVGPAWVVSAAHCFERLRSRGNLTAVLGEHDLSRVEGPEQERRVAQIIVPKQYVPGQTD 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||:|||:| ||| | ||| ||||||:  |:::|||||||| ||||||||:|| || :|||:
Db        241 HDVALLQLAQPVALGDHVAPLCLPDPDFADQTLAFVRFSAVSGWGQLLERGVTARKLMVV 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||:|||||||||:    | :|: |||||||||||||:|||||||||| :||||:|||
Db        301 LVPRLLTQDCLQQSRQRPGGPVVTDNMFCAGYSDGSKDACKGDSGGPHATRFRGTWFLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEP 395
              :||||:|||  ||||:|||||:|  ||::||   |
Db        361 VVSWGEGCAAAGHFGIYTRVSRYTAWLRQLMGHPP 395


RESULT 4
S69339
Ig heavy chain V region precursor - human
C;Species: Homo sapiens (man)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 01-Dec-2000
C;Accession: S69339; S72664
R;Khamlichi, A.A.; Aucouturier, P.; Preud'homme, J.L.; Cogne, M.
Eur. J. Biochem. 229, 54-60, 1995
A;Title: Structure of abnormal heavy chains in human heavy-chain-deposition disease.
A;Reference number: S69339; MUID:95262687; PMID:7744049
A;Accession: S69339
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-374 <KHA>
A;Cross-references: EMBL:X81695
R;Khamlichi, A.A.
submitted to the EMBL Data Library, September 1994
A;Reference number: S72664
A;Accession: S72664
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-140,'C',142-374 <KH2>
A;Cross-references: EMBL:X81695
C;Superfamily: immunoglobulin C region; immunoglobulin homology

  Query Match             36.7%;  Score 1270;  DB 2;  Length 374;
  Best Local Similarity   65.8%;  Pred. No. 2.5e-69;
  Matches  264;  Conservative   19;  Mismatches   60;  Indels   58;  Gaps    9;

Qy        252 VVLTDHVVPLCLPERTFSERTLAFVRFSLVS---GWGQLLDRGATALELMVLNVPRLMTQ 308
              : | :   |  | :| :  |  |  |||     | | :     ||| : |    :
Db         21 ITLKESGPTLVKPTQTLT-LTCTFSGFSLSKSGVGVGWIRQPPGQALEWLAL----IFWD 75

Qy        309 DCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGD--------SGGPHATHYRGTWYLTG 360
              |  : |  :      ||             ||: |              ||:| |
Db         76 DDKRYSPSLRTRLTIT-----------KDTSKNQVVLTMTNVDPADTATYYCG----YS 119

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420
              :  :|||              ::  | |         | |:      |:||||||||||
Db        120 VEGYGQG-------------YRFHSWGQ---------GTLVTV----SSEPKSCDKTHTC 153

Qy        421 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        154 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 213

Qy        481 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        214 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 273

Qy        541 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600
              |||||||||:|:|||||||||||||||||||||||||||||||||||||||||||||||
Db        274 QVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 333

Qy        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||||||||||||||||||||||||||||||||||||||||
Db        334 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 374


RESULT 5
GHHU
Ig gamma-1 chain C region - human
C;Species: Homo sapiens (man)
C;Date: 31-Jan-1981 #sequence_revision 18-Aug-1982 #text_change 09-Jul-2004
C;Accession: A93433; S36861; S33887; B90563; A90564; B91668; A91723; A02146
R;Ellison, J.W.; Berson, B.J.; Hood, L.E.
Nucleic Acids Res. 10, 4071-4079, 1982
A;Title: The nucleotide sequence of a human immunoglobulin C-gamma1 gene.
A;Reference number: A93433; MUID:82274238; PMID:6287432
A;Accession: A93433
A;Molecule type: DNA
A;Residues: 1-330 <ELL>
A;Cross-references: UNIPROT:P01857; EMBL:Z17370
A;Note: this sequence has the G1m(17) allotypic marker, 97-Lys, and the G1m(1) markers,
A;Note: Lys-330 is removed after translation
R;Harris, L.J.
submitted to the EMBL Data Library, October 1992
A;Reference number: S33904
A;Accession: S36861
A;Molecule type: DNA
A;Residues: 2-330 <HAR>
A;Cross-references: EMBL:Z17370
R;Takahashi, N.; Ueda, S.; Obata, M.; Nikaido, T.; Nakai, S.; Honjo, T.
Cell 29, 671-679, 1982
A;Title: Structure of human immunoglobulin gamma genes: implications for evolution of a
A;Reference number: S33887; MUID:83001943; PMID:6811139
A;Accession: S33887
A;Molecule type: DNA
A;Residues: 88-113;235-330 <TAK>
A;Cross-references: EMBL:Z17370
R;Cunningham, B.A.; Rutishauser, U.; Gall, W.E.; Gottlieb, P.D.; Waxdal, M.J.; Edelman,
Biochemistry 9, 3161-3170, 1970
A;Title: The covalent structure of a human gammaG-immunoglobulin. VII. Amino acid seque
A;Reference number: A90563; MUID:71064024; PMID:5489771
A;Contents: myeloma protein Eu
A;Accession: B90563
A;Molecule type: protein
A;Residues: 1-96,'R',98-135 <CUN>
A;Note: this sequence has the G1m(3) marker, 97-Arg
R;Rutishauser, U.; Cunningham, B.A.; Bennett, C.; Konigsberg, W.H.; Edelman, G.M.
Biochemistry 9, 3171-3181, 1970
A;Title: The covalent structure of a human gammaG-immunoglobulin. VIII. Amino acid sequ
A;Reference number: A90564; MUID:71064025; PMID:5530842
A;Contents: Eu
```

```
A;Accession: A90564
A;Molecule type: protein
A;Residues: 136-154,'Q',156-165,'Q',167-176,'Q',178-194,'N',196-197,'D',199-238,'E',240,
A;Note: this sequence has the G1m(non-1) markers, 239-Glu and 241-Met
R;Ponstingl, H.; Hilschmann, N.
Hoppe-Seyler's Z. Physiol. Chem. 357, 1571-1604, 1976
A;Title: Die Primaerstruktur eines monoklonalen IgG1-Immunglobulins (Myelomprotein Nie),
igen Primaerstruktur.
A;Reference number: A91668; MUID:77070269; PMID:826475
A;Contents: myeloma protein Nie
A;Accession: B91668
A;Molecule type: protein
A;Residues: 1-34,'Q',36-96,'K',98-115,'Q',117-197,'D',199-238,'D',240,'L',242-268,'E',27
A;Note: this sequence has the G1m(17) and G1m(1) markers
R;Schmidt, W.E.; Jung, H.D.; Palm, W.; Hilschmann, N.
Hoppe-Seyler's Z. Physiol. Chem. 364, 713-747, 1983
A;Title: Die Primaerstruktur des kristallisierbaren monoklonalen Immunglobulins IgG1 KOL
A;Reference number: A91723; MUID:83289131; PMID:6884994
A;Contents: myeloma protein KOL; disulfide bonds
A;Accession: A91723
A;Molecule type: protein
A;Residues: 1-96,'R',98-197,'D',199-238,'E',240,'M',242-266,'D',268-271,'D',273-330 <SCH
A;Note: this sequence has the G1m(3) and G1m(non-1) markers
R;Gall, W.E.; Edelman, G.M.
Biochemistry 9, 3188-3196, 1970
A;Title: The covalent structure of a human gammaG-immunoglobulin. X. Intrachain disulfid
A;Reference number: A90565; MUID:71064027; PMID:4923144
A;Contents: annotation; disulfide bonds
R;Dreker, L.; Schwarz, J.; Reichel, W.; Hilschmann, N.
Hoppe-Seyler's Z. Physiol. Chem. 357, 1515-1540, 1976
A;Title: Rule of antibody structure. The primary structure of monoclonal IgG1 immunoglob
enbromide cleavage products, and the disulfide bridges.
A;Reference number: A91667; MUID:77070267; PMID:1002129
A;Contents: annotation; disulfide bonds
C;Genetics:
A;Gene: GDB:IGHG1
A;Cross-references: GDB:120085; OMIM:147100
A;Map position: 14q32.33-14q32.33
A;Introns: 99/1; 114/1; 224/1
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into la
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;20-85/Domain: immunoglobulin homology <IM1>
F;137-206/Domain: immunoglobulin homology <IM2>
F;243-310/Domain: immunoglobulin homology <IM3>
F;27-83,144-204,250-308/Disulfide bonds: #status experimental
F;103/Disulfide bonds: interchain (to light chain) #status experimental
F;109,112/Disulfide bonds: interchain (to heavy chain) #status experimental
F;180/Binding site: carbohydrate (Asn) (covalent) #status experimental

  Query Match             36.5%;  Score 1265;  DB 1;  Length 330;
  Best Local Similarity   78.1%;  Pred. No. 4.4e-69;
  Matches  250;  Conservative    4;  Mismatches   46;  Indels   20;  Gaps    4;

Qy        339 SCKGDSGGPHATHYRGTWYLTG--IVSWGQGCATVG---------HFGVY------TRVS 381
              | |  |||  |       |      |||  | | |           |:|      | |
Db         14 SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPS 73

Qy        382 QYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 441
                :    :   :|                |||||||||||||||||||||||||||||||
Db         74 SSLGTQTYICNVNHKPS---NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP 130

Qy        442 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 501
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        131 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLT 190

Qy        502 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 561
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        191 VLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC 250

Qy        562 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 621
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        251 LVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV 310

Qy        622 MHEALHNHYTQKSLSLSPGK 641
              ||||||||||||||||||||
Db        311 MHEALHNHYTQKSLSLSPGK 330


RESULT 6
S31866
Ig gamma-1 chain C region - synthetic
C;Species: synthetic
A;Note: Homo sapiens (man) gene engineered and expressed in Escherichia coli
C;Date: 06-Jan-1995 #sequence_revision 17-Mar-1997 #text_change 19-May-2000
C;Accession: S31866
R;Filpula, D.
submitted to the EMBL Data Library, February 1993
A;Description: Screeing method for protein-protein interactions of cloned gene products
A;Reference number: S31866
A;Accession: S31866
A;Molecule type: mRNA
A;Residues: 1-255 <FIL>
A;Cross-references: EMBL:X70421; NID:g33068; PIDN:CAA49866.1; PID:g33069
C;Keywords: immunoglobulin
F;1-22/Region: Escherichia coli outer membrane protein A precursor
F;23-255/Region: human Ig gamma-1 chain C region

  Query Match             36.2%;  Score 1255;  DB 4;  Length 255;
  Best Local Similarity   99.6%;  Pred. No. 1.4e-68;
  Matches  231;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        410 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 469
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         24 ESKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83

Qy        470 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 529
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143

Qy        530 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 589
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203

Qy        590 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 255


RESULT 7
PT0207
Ig gamma chain C region - chimpanzee
C;Species: Pan troglodytes (chimpanzee)
C;Date: 23-Nov-1991 #sequence_revision 23-Nov-1991 #text_change 16-Jul-1999
C;Accession: PT0207
R;Ehrlich, P.H.; Moustafa, Z.A.; Oestberg, L.
Mol. Immunol. 28, 319-322, 1991
A;Title: Nucleotide sequence of chimpanzee Fc and hinge regions.
A;Reference number: PT0207; MUID:91287716; PMID:2062315
A;Accession: PT0207
A;Molecule type: mRNA
A;Residues: 1-234 <EHR>
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: immunoglobulin
F;48-117/Domain: immunoglobulin homology <IMM>

  Query Match             34.9%;  Score 1210;  DB 2;  Length 234;
  Best Local Similarity   98.7%;  Pred. No. 6.4e-66;
  Matches  222;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        410 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 469
              |||||| ||||||| ||||||||||||||||||||||||||||||||||||||||||||||
Db         10 EPKSCDTTHTCPPCAAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 69

Qy        470 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 529
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          70 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 129

Qy         530 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 589
                |||||||||||||||||||||||||||||||||||||||||||||||||:||||||||||
Db         130 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESSGQPENNYKTTP 189

Qy         590 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS 634
                |||||||||||||||||||||||||||||||||||||||||||||
Db         190 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS 234


RESULT 8
A23511
Ig gamma-3 chain C region (allotype G3m(b)) - human
C;Species: Homo sapiens (man)
C;Date: 28-Dec-1987 #sequence_revision 28-Dec-1987 #text_change 23-Jul-1999
C;Accession: A23511
R;Huck, S.; Fort, P.; Crawford, D.H.; Lefranc, M.P.; Lefranc, G.
Nucleic Acids Res. 14, 1779-1789, 1986
A;Title: Sequence of a human immunoglobulin gamma 3 heavy chain constant region gene: cc
A;Reference number: A23511; MUID:86148507; PMID:3081877
A;Accession: A23511
A;Molecule type: DNA
A;Residues: 1-377 <HUC>
A;Cross-references: GB:X03604; GB:M12958; NID:g33070; PIDN:CAA27268.1; PID:g577056
C;Genetics:
A;Gene: GDB:IGHG3
A;Cross-references: GDB:119339; OMIM:147120
A;Map position: 14q32.33-14q32.33
A;Introns: 98/3; 115/3; 130/3; 145/3; 160/3; 270/3
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: immunoglobulin
F;20-85/Domain: immunoglobulin homology <IMM>

  Query Match             34.2%;  Score 1184;  DB 2;  Length 377;
  Best Local Similarity   91.2%;  Pred. No. 3.8e-64;
  Matches  217;  Conservative    8;  Mismatches   13;  Indels    0;  Gaps    0;

Qy         404 PFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE 463
                | |   ||||||    || ||||||||||||||||||||||||||||||||||||||||
Db         140 PCPRCPEPKSCDTPPPCPRCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE 199

Qy         464 DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALP 523
                ||||:| |||||||||||||||||||||:|||||||||||||||||||||||||||||||
Db         200 DPEVQFKWYVDGVEVHNAKTKPREEQYNSTFRVVSVLTVLHQDWLNGKEYKCKVSNKALP 259

Qy         524 APIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN 583
                ||||||||| |||||||||||||||:|:|||||||||||||||||||||||:|||||
Db         260 APIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSGQPEN 319

Qy         584 NYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
                || ||||:|||||||||||||||||||||:|||||||||||| :||||||||||
Db         320 NYNTTPPMLDSDGSFFLYSKLTVDKSRWQQGNIFSCSVMHEALHNRFTQKSLSLSPGK 377


RESULT 9
A60764
Ig gamma-3 chain C region, form LAT - human
C;Species: Homo sapiens (man)
C;Date: 14-May-1993 #sequence_revision 14-May-1993 #text_change 09-Jul-2004
C;Accession: A60764
R;Huck, S.; Lefranc, G.; Lefranc, M.P.
Immunogenetics 30, 250-257, 1989
A;Title: A human immunoglobulin IGHG3 allele (Gmb0, b1, c3, c5, u) with an IGHG4 convert
A;Reference number: A60764; MUID:90007613; PMID:2571587
A;Accession: A60764
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-377 <HUC>
A;Cross-references: UNIPROT:Q8N4Y9
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: immunoglobulin
F;20-85/Domain: immunoglobulin homology <IMM>

  Query Match             34.1%;  Score 1182;  DB 2;  Length 377;
  Best Local Similarity   91.2%;  Pred. No. 5e-64;
  Matches  217;  Conservative    8;  Mismatches   13;  Indels    0;  Gaps    0;

Qy         404 PFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE 463
                | |   ||||||    || ||||||||||||||||||||||||||||||||||||||||
Db         140 PCPRCPEPKSCDTPPPCPRCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE 199

Qy         464 DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALP 523
                ||||:| |||||||||||||||||||||:|||||||||||||||||||||||||||||||
Db         200 DPEVQFKWYVDGVEVHNAKTKPREEQYNSTFRVVSVLTVLHQDWLNGKEYKCKVSNKALP 259

Qy         524 APIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN 583
                ||||||||| |||||||||||||||:|:|||||||||||||||||||||||:|||||
Db         260 APIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSGQPEN 319

Qy         584 NYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNRFTQKSLSLSPGK 641
                || ||||||||||||||||:|||||||:|||||||||||||| :||||||||||
Db         320 NYNTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNRFTQKSLSLSPGK 377


RESULT 10
G3HUWI
Ig gamma-3 heavy chain disease proteins - human
C;Species: Homo sapiens (man)
C;Date: 31-Dec-1979 #sequence_revision 23-Oct-1981 #text_change 16-Jul-1999
C;Accession: A90442; A92219; A90198; A93915; A02149
R;Frangione, B.; Rosenwasser, E.; Prelli, F.; Franklin, E.C.
Biochemistry 19, 4304-4308, 1980
A;Title: Primary structure of human gamma3 immunoglobulin deletion mutant: gamma3 heavy
A;Reference number: A90442; MUID:81021548; PMID:6774747
A;Contents: heavy chain disease protein Wis
A;Accession: A90442
A;Molecule type: protein
A;Residues: 1-289 <FRA>
A;Note: the molecule is a dimer linked by 12 disulfide bonds; it has an extra interchai
A;Note: this protein lacks most of the V region and all of the CH1 region. Residue 12 c
A;Note: the sequence of residues 42-76 was taken from the reference that follows
R;Michaelsen, T.E.; Frangione, B.; Franklin, E.C.
J. Biol. Chem. 252, 883-889, 1977
A;Title: Primary structure of the 'hinge' region of human IgG3. Probable quadruplicatio
A;Reference number: A92219; MUID:77118561; PMID:402363
A;Contents: normal gamma-3 chains, sequence corresponding to residues 12-97 of protein
A;Accession: A92219
A;Molecule type: protein
A;Residues: 12-97 <MIC>
A;Note: the hinge region in gamma-3 chains is about four times as long as in other gamm
idue segment (12-28)
A;Note: cysteines at positions 24, 27, 33, 39, 42, 48, 54, 57, 63, 69, and 72 form inte
R;Wolfenstein-Todel, C.; Frangione, B.; Prelli, F.; Franklin, E.C.
Biochem. Biophys. Res. Commun. 71, 907-914, 1976
A;Title: The amino acid sequence of "heavy chain disease" protein ZUC. Structure of the
A;Reference number: A90198; MUID:77021516; PMID:823945
A;Contents: heavy chain disease protein Zuc, partial sequence corresponding to residues
A;Accession: A90198
A;Molecule type: protein
A;Residues: 59-125,'EB',128-226,228-289 <WOL>
A;Note: this protein lacks most of the V region, all of the CH1 region, and part of the
R;Alexander, A.; Steinmetz, M.; Barritault, D.; Frangione, B.; Franklin, E.C.; Hood, L.
Proc. Natl. Acad. Sci. U.S.A. 79, 3260-3264, 1982
A;Title: gamma heavy chain disease in man: cDNA sequence supports partial gene deletion
A;Reference number: A93915; MUID:82247835; PMID:6808505
A;Contents: heavy chain disease protein Omm
A;Accession: A93915
A;Molecule type: mRNA
A;Residues: 12-70;72-114;116-125,'E',127-133,'L',135-136,'E',138,'Y',140-154,'D',156-15
A;Note: a carboxyl-terminal Lys is removed posttranslationally
A;Note: this sequence may represent an allelic form or another gamma chain subclass
C;Comment: The heavy chain disease protein Wis is shown.
C;Genetics:
A;Gene: GDB:IGHG3
```

```
A;Cross-references: GDB:119339; OMIM:147120
A;Map position: 14q32.33-14q32.33
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; immunoglobulin; pyroglutamic acid
F;203-270/Domain: immunoglobulin homology <IMM>
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;6,140/Binding site: carbohydrate (Asn) (covalent) #status experimental

  Query Match             33.5%;  Score 1159;  DB 1;  Length 289;
  Best Local Similarity   89.0%;  Pred. No. 9.3e-63;
  Matches  211;  Conservative   13;  Mismatches   13;  Indels    0;  Gaps    0;

Qy        404 PFPGSAEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE 463
              | |   ||||||    || ||||||||||||||||||||||||||||||||||||||||
Db         53 PCPRCPEPKSCDTPPPCPRCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE 112

Qy        464 DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALP 523
              ||||:| ||||||:|||||||||||:|:|||:||||||||||:||:|||||||||||||
Db        113 DPEVQFKWYVDGVQVHNAKTKPREQQFNSTFRVVSVLTVLHQNWLDGKEYKCKVSNKALP 172

Qy        524 APIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN 583
              ||||||||| |||||||||||||||:|:|||||||||||||||||||||||:|||||
Db        173 APIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSGQPEN 232

Qy        584 NYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG 640
              || ||||:|||||||||||||||||||:||||||||||| :||||||||||
Db        233 NYNTTPPMLDSDGSFFLYSKLTVDKSRWQQGNIFSCSVMHEALHNRFTQKSLSLSPG 289


RESULT 11
G2HU
Ig gamma-2 chain C region - human
C;Species: Homo sapiens (man)
C;Date: 30-Apr-1981 #sequence_revision 13-Jun-1983 #text_change 09-Jul-2004
C;Accession: A93906; A92809; A90752; A93132; A02148
R;Ellison, J.; Hood, L.
Proc. Natl. Acad. Sci. U.S.A. 79, 1984-1988, 1982
A;Title: Linkage and sequence homology of two human immunoglobulin gamma heavy chain con
A;Reference number: A93906; MUID:82197621; PMID:6804948
A;Accession: A93906
A;Molecule type: DNA
A;Residues: 1-326 <ELL>
A;Cross-references: UNIPROT:P01859; GB:V00554; GB:J00230; NID:g32759; PIDN:CAB58438.1; P
A;Note: Lys-326 is probably removed posttranslationally
R;Wang, A.C.; Tung, E.; Fudenberg, H.H.
J. Immunol. 125, 1048-1054, 1980
A;Title: The primary structure of a human IgG2 heavy chain: genetic, evolutionary, and f
A;Reference number: A92809; MUID:81007873; PMID:6774012
A;Contents: myeloma protein Til
A;Accession: A92809
A;Molecule type: protein
A;Residues: 1-19,'Q',21-57,'Z',59,'A',61-193,'D',195-325 <WAN>
A;Note: Trp-156 is at or near the complement-binding site
R;Connell, G.E.; Parr, D.M.; Hofmann, T.
Can. J. Biochem. 57, 758-767, 1979
A;Title: The amino acid sequences of the three heavy chain constant region domains of a
A;Reference number: A90752; MUID:80001357; PMID:113060
A;Contents: myeloma protein Zie
A;Accession: A90752
A;Molecule type: protein
A;Residues: 1-24,'E',26-57,'EV',60-85;132-171,'ZZZ',175,'B',177-193,'D',195-196,'Q',198-
A;Note: this sequence has since been revised
R;Hofmann, T.; Parr, D.M.
Mol. Immunol. 16, 923-925, 1979
A;Title: A note on the amino acid sequence of residues 381-391 of human immunoglobulin g
A;Reference number: A93132; MUID:80114419; PMID:118920
A;Contents: Zie
A;Accession: A93132
A;Molecule type: protein
A;Residues: 238-275 <HOF>
R;Hofmann, T.; Parr, D.M.
submitted to the Atlas, March 1980
A;Reference number: A94591
A;Contents: annotation; Zie, revisions to residues 25, 59, 60, and 264-268
A;Note: the revised sequence differs from that shown in having 60-Ala and in the amidat
ned
R;Milstein, C.; Frangione, B.
Biochem. J. 121, 217-225, 1971
A;Title: Disulphide bridges of the heavy chain of human immunoglobulin G2.
A;Reference number: A90253; MUID:72033500; PMID:4940472
A;Contents: annotation; myeloma protein Sa, disulfide bonds
R;Frangione, B.; Milstein, C.; Pink, J.R.L.
Nature 221, 145-148, 1969
A;Title: Structural studies of immunoglobulin G.
A;Reference number: A93157; MUID:69064124; PMID:5782707
A;Contents: annotation; Sa, disulfide bonds
C;Genetics:
A;Gene: GDB:IGHG2
A;Cross-references: GDB:119338; OMIM:147110
A;Map position: 14q32.33-14q32.33
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (ka
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into l
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;20-85/Domain: immunoglobulin homology <IM1>
F;133-202/Domain: immunoglobulin homology <IM2>
F;239-306/Domain: immunoglobulin homology <IM3>
F;14/Disulfide bonds: interchain (to light chain) #status experimental
F;27-83,140-200,246-304/Disulfide bonds: #status experimental
F;102,103,106,109/Disulfide bonds: interchain (to heavy chain) #status experimental
F;176/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             33.2%;  Score 1150;  DB 1;  Length 326;
  Best Local Similarity   68.0%;  Pred. No. 3.6e-62;
  Matches  229;  Conservative   16;  Mismatches   46;  Indels   46;  Gaps    5;

Qy        339 SCKGDSGGPHATHYRGTWYLTG-------------IVSWGQGCATVGHFGVYTRVSQYI 384
              | || |  | |  | |  |                 |||  |  | |          :
Db          2 STKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSG-----------V 50

Qy        385 EWLQKLMRSEPRPGVLLRAPFPGS---AEPKSCDKTH-----------------TCPPCP 424
                :::|     :      | |    :  :|:  |                      |||||
Db         51 HTFPAVLQSSGLYSLSSVVTVPSSNFGTQTYTCNVDHKPSNTKVDKTVERKCCVECPPCP 110

Qy        425 APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK 484
              ||  : |||||||||||||||||||||||||||||||||||:||||||||||||||||
Db        111 APP-VAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTK 169

Qy        485 PREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYT 544
              |||||:|||:||||||||:|||||||||||||||| |||||||||| |||||||||||
Db        170 PREEQFNSTFRVVSVLTVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYT 229

Qy        545 LPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKL 604
              |||||:|:|||||||||||||||||||||||||||||||||||||||:|||||||||||||
Db        230 LPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPMLDSDGSFFLYSKL 289

Qy        605 TVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||||||||||||||||||||||||||||||||||||
Db        290 TVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 326


RESULT 12
G4HU
Ig gamma-4 chain C region - human
C;Species: Homo sapiens (man)
C;Date: 02-Apr-1982 #sequence_revision 02-Apr-1982 #text_change 09-Jul-2004
C;Accession: A90933; A90249; A02150
R;Ellison, J.; Buxbaum, J.; Hood, L.
DNA 1, 11-18, 1981
A;Title: Nucleotide sequence of a human immunoglobulin C-gamma4 gene.
A;Reference number: A90933; MUID:83157104; PMID:6299662
A;Accession: A90933
A;Molecule type: DNA
A;Residues: 1-327 <ELL>
A;Cross-references: UNIPROT:P01861
A;Note: the sequence was determined from the germline gene
```

```
R;Pink, J.R.L.; Buttery, S.H.; De Vries, G.M.; Milstein, C.
Biochem. J. 117, 33-47, 1970
A;Title: Human immunoglobulin sublclasses. Partial amino acid sequence of the constant r
A;Reference number: A90249; MUID:70207560; PMID:4192699
A;Accession: A90249
A;Molecule type: protein
A;Residues: 1-30;81-326 <PIN>
C;Genetics:
A;Gene: GDB:IGHG4
A;Cross-references: GDB:119340; OMIM:147130
A;Map position: 14q32.33-14q32.33
A;Introns: 99/1; 111/1; 221/1
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into la
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;20-85/Domain: immunoglobulin homology <IM1>
F;99-110/Region: hinge
F;134-203/Domain: immunoglobulin homology <IM2>
F;240-307/Domain: immunoglobulin homology <IM3>
F;14/Disulfide bonds: interchain (to light chain) #status experimental
F;27-83,141-201,247-305/Disulfide bonds: #status predicted
F;106,109/Disulfide bonds: interchain (to heavy chain) #status experimental
F;177/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match           33.0%;  Score 1142.5;  DB 1;  Length 327;
  Best Local Similarity  67.7%;  Pred. No. 1e-61;
  Matches  228;  Conservative   17;  Mismatches   47;  Indels   45;  Gaps    4;

Qy        339 SCKGDSGGPHATHYRGTWYLTG--------------IVSWGQGCATVGHFGVYTRVSQYI 384
              | || |  | |   | |   |                 |||  |  | |           :
Db          2 STKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSG-----------V 50

Qy        385 EWLQKLMRSEPRPGVLLRAPFPGSA---EPKSCDKTH----------------TCPPCP 424
                :::|     :      | |:   :  :|:  |                  || ||
Db         51 HTFPAVLQSSGLYSLSSVVTVPSSSLGTKTYTCNVDHKPSNTKVDKRVESKYGPPCPSCP 110

Qy        425 APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK 484
              ||| |||||||||||||||||||||||||||||||| |||||:|||||||||||||||||
Db        111 APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTK 170

Qy        485 PREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYT 544
              |||||:|||||||||||||||||||||||||||| ||: ||||||||||||||||||||
Db        171 PREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYT 230

Qy        545 LPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKL 604
              ||||::|:|||||||||||||||||||||||||||||||||||||||||||||||||:|
Db        231 LPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRL 290

Qy        605 TVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              ||||||||:|||||||||||||||||||||||| ||
Db        291 TVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK 327


RESULT 13
GHRB
Ig gamma chain C region - rabbit
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 24-Apr-1984 #sequence_revision 15-Nov-1984 #text_change 09-Jul-2004
C;Accession: A91749; A90290; A93928; A90245; A94416; A02161
R;Bernstein, K.E.; Alexander, C.B.; Mage, R.G.
Immunogenetics 18, 387-397, 1983
A;Title: Nucleotide sequence of a rabbit IgG heavy chain from the recombinant F-I haplot
A;Reference number: A91749; MUID:84030930; PMID:6313520
A;Accession: A91749
A;Molecule type: mRNA
A;Residues: 1-323 <BER>
A;Cross-references: UNIPROT:P01870
A;Note: this sequence has the d12 allotypic marker, 104-Thr, and the e14 marker, 185-Thr
R;Pratt, D.M.; Mole, L.E.
Biochem. J. 151, 337-349, 1975
A;Title: Sequence studies on the constant region of the Fd sections of rabbit immunoglob
A;Reference number: A90290; MUID:76135469; PMID:1243651
A;Accession: A90290
A;Molecule type: protein
A;Residues: 1-47,'E',49-71,'PV',72-128 <PRA>
R;Martens, C.L.; Moore, K.W.; Steinmetz, M.; Hood, L.; Knight, K.L.
Proc. Natl. Acad. Sci. U.S.A. 79, 6018-6022, 1982
A;Title: Heavy chain genes of rabbit IgG; isolation of a cDNA encoding gamma heavy chai
A;Reference number: A93928; MUID:83299917; PMID:6193512
A;Accession: A93928
A;Molecule type: mRNA
A;Residues: 88-103,'M',105-143,'E',145-184,'A',186,'E',188-266 <MAR>
A;Cross-references: GB:M16426; NID:g165111; PIDN:AAA31289.1; PID:g165112
A;Note: this sequence has the d11 allotypic marker, 104-Met, and the e15 allotypic mark
R;Fruchter, R.G.; Jackson, S.A.; Mole, L.E.; Porter, R.R.
Biochem. J. 116, 249-259, 1970
A;Title: Sequence studies of the Fd section of the heavy chain of rabbit immunoglobulin
A;Reference number: A90245; MUID:70110015; PMID:5461106
A;Accession: A90245
A;Molecule type: protein
A;Residues: 132-143,'E',145-161 <FRU>
R;Hill, R.L.; Lebovitz, H.E.; Fellows Jr., R.E.; Delaney, R.
in Gamma Globulins, Nobel Symp. 3, Killander, J., ed., pp.109-127, Almqvist and Wiksell
A;Reference number: A94416
A;Accession: A94416
A;Molecule type: protein
A;Residues: 129-131;155-172,'D',174-184,'A',186,'E',188-200,'D',202-217,'E',219-232,'Q'
A;Note: this has the e15 allotypic marker, 185-Ala
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (ka
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into l
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;20-82/Domain: immunoglobulin homology <IM1>
F;130-199/Domain: immunoglobulin homology <IM2>
F;236-303/Domain: immunoglobulin homology <IM3>
F;173/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match           26.8%;  Score 929;  DB 1;  Length 323;
  Best Local Similarity  53.5%;  Pred. No. 7.2e-49;
  Matches  183;  Conservative   40;  Mismatches   67;  Indels   52;  Gaps    6;

Qy        318 GDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG--IVSWGQGCATVGHFG 375
              ||:|: |  : |           ||              ||     |:|  |  | |
Db         16 GDTPSSTVTLGCL---------VKG--------------YLPEPVTVTWNSGTLTNG--- 49

Qy        376 VYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTH--------------TC- 420
                      :    : :|     :         |::| :|:  |               ||
Db         50 --------VRTFPSVRQSSGLYSLSSVVSVTSSSQPVTCNVAHPATNTKVDKTVAPSTCS 101

Qy        421 -PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 479
               | || ||||||||||:|||||||||||||||||||||||| :||||:|  ||::  :|
Db        102 KPTCPPPELLGGPSVFIFPPKPKDTLMISRTPEVTCVVVDVSQDDPEVQFTWYINNEQVR 161

Qy        480 NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE 539
               |:   ||:|:||| |||| | : ||||| |||:|||| |||||||||||||:||| |
Db        162 TARPPLREQQFNSTIRVVSTLPITHQDWLRGKEFKCKVHNKALPAPIEKTISKARGQPLE 221

Qy        540 PQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF 599
              |:|||: | |:||:   |||||:: |||||||:|||| ||: |:|||||| |||||||:|
Db        222 PKVYTMGPPREELSSRSVSLTCMINGFYPSDISVEWEKNGKAEDNYKTTPAVLDSDGSYF 281

Qy        600 LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              ||:||:|  | ||:|:||:|||||||||||||||:| ||||
Db        282 LYNKLSVPTSEWQRGDVFTCSVMHEALHNHYTQKSISRSPGK 323


RESULT 14
I47160
Ig gamma 2b chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47160
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a
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A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47160
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03780; NID:g433125; PIDN:AAA52218.1; PID:g433126
C;Genetics:
A;Gene: IgG2b
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

  Query Match             26.4%;  Score 914.5;  DB 2;  Length 328;
  Best Local Similarity   54.5%;  Pred. No. 5.4e-48;
  Matches  183;  Conservative   42;  Mismatches   56;  Indels   55;  Gaps    8;

Qy        340 CKGDSGGPH------ATHYRGTWYLTGIVSWGQGCATVG---------HFGVYTRVSQYI 384
              |  |: ||:      |: |   :     |:|  |  | |          |:|:  |
Db         14 CGRDTSGPNVALGCLASSY---FPEPVTVTWNSGALTSGVHTFPSVLQPSGLYSLSS--- 67

Qy        385 EWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTH----------------TCPPCPAPE 427
                | : |   :        |::  :|:  |                  || ||| |
Db         68 ------MVTVPASSL--------SSKSYTCNVNHPATTTKVDKRVGTKTKPPCPICPACE 113

Qy        428 LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPRE 487
              |||||:||||||||||||||:||||||||| |:|||:|:|||||||| |:|:|:|
Db        114 -SPGPSVFIFPPKPKDTLMISRTPQVTCVVVDVSQENPEVQFSWYVDGVEVHTAQTRPKE 172

Qy        488 EQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP 547
              ||:|||||||||| : |||||||||:||||:|| ||||| : ||||||| ||||||||||
Db        173 EQFNSTYRVVSVLPIQHQDWLNGKEFKCKVNNKDLPAPITRIISKAKGQTREPQVYTLPP 232

Qy        548 SRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVLDSDGSFFLYSKLT 605
                :||::::||:|||| |||| || |||: |||  || ||:||||  | ||::|||||  :
Db        233 HAEELSRSKVSITCLVIGFYPPDIDVEWQRNGQPEPEGNYRTTPPQQDVDGTYFLYSKFS 292

Qy        606 VDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||: || | :| |:|||||||||||||:| :|||
Db        293 VDKASWQGGGIFQCAVMHEALHNHYTQKSISKTPGK 328


RESULT 15
I47159
Ig gamma 2a chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47159
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a s
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47159
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03779; NID:g433123; PIDN:AAA52217.1; PID:g433124
C;Genetics:
A;Gene: IgG2a
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

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  Best Local Similarity   54.2%;  Pred. No. 7.2e-48;
  Matches  182;  Conservative   43;  Mismatches   56;  Indels   55;  Gaps    8;

Qy        340 CKGDSGGPH------ATHYRGTWYLTGIVSWGQGCATVG---------HFGVYTRVSQYI 384
              |  |: ||:      |: |   :     |:|  |  : |          |:|:  |
Db         14 CSRDTSGPNVALGCLASSY---FPEPVTVTWNSGALSSGVHTFPSVLQPSGLYSLSS--- 67

Qy        385 EWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTH----------------TCPPCPAPE 427
                | : |   :        |::  :|:  |                  || ||| |
Db         68 ------MVTVPASSL--------SSKSYTCNVNHPATTTKVDKRVGTKTKPPCPICPACE 113

Qy        428 LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPRE 487
              |||||:||||||||||||||:||||||||| |:|||:|:|||||||| |:|:|:|
Db        114 -SPGPSVFIFPPKPKDTLMISRTPQVTCVVVDVSQENPEVQFSWYVDGVEVHTAQTRPKE 172

Qy        488 EQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPP 547
              ||:|||||||||| : |||||||||:||||:|| ||||| : ||||||| ||||||||||
Db        173 EQFNSTYRVVSVLPIQHQDWLNGKEFKCKVNNKDLPAPITRIISKAKGQTREPQVYTLPP 232

Qy        548 SRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVLDSDGSFFLYSKLT 605
                :||::::||:|||| |||| || |||: |||  || ||:||||  | ||::|||||  :
Db        233 HAEELSRSKVSITCLVIGFYPPDIDVEWQRNGQPEPEGNYRTTPPQQDVDGTYFLYSKFS 292

Qy        606 VDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
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Db        293 VDKASWQGGGIFQCAVMHEALHNHYTQKSISKTPGK 328


Search completed: February 10, 2005, 05:43:57
Job time : 27.433 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 100.592 Seconds
(without alignments)
2464.539 Million cell updates/sec

Title: US-10-617-619A-8
Perfect score: 3464
Sequence: 1 ANAFLXXLRPGSLXRXCKXX.....MHEALHNHYTQKSLSLSPGK 641

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	3464	100.0	641	8	ADJ57513	Adj57513 Human FVI
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3	3464	100.0	701	8	ADJ57511	Adj57511 Human FVI
4	2187	63.1	406	2	AAR35764	Aar35764 Factor VI
5	2187	63.1	406	4	AAB84866	Aab84866 Wild-type
6	2187	63.1	406	4	AAM52172	Aam52172 Mammalian
7	2187	63.1	406	4	AAM52171	Aam52171 Human FVI
8	2187	63.1	406	5	AAU77188	Aau77188 Human coa
9	2187	63.1	406	5	ABG31688	Abg31688 Human coa
10	2187	63.1	406	5	ABB09178	Abb09178 Human Fac
11	2187	63.1	406	5	ABB80051	Abb80051 Human coa
12	2187	63.1	406	6	ABG73119	Abg73119 Human coa
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14	2187	63.1	406	6	AAO30527	Aao30527 Human wil
15	2187	63.1	406	7	ADD02791	Add02791 Human fac
16	2187	63.1	406	7	ADD93664	Add93664 Human fac
17	2187	63.1	406	7	ADF44971	Adf44971 Human Fac
18	2187	63.1	406	8	ADJ55850	Adj55850 Wild type
19	2187	63.1	406	8	ADJ57413	Adj57413 Human Fac
20	2187	63.1	406	8	ADJ57506	Adj57506 Human coa
21	2187	63.1	406	8	ADO10531	Ado10531 Human fac
22	2187	63.1	406	8	ADM66523	Adm66523 Human coa
23	2187	63.1	406	8	ADO05102	Ado05102 Human coa
24	2187	63.1	406	8	ADO14233	Ado14233 Human coa
25	2187	63.1	406	8	ADR06449	Adr06449 Human coa
26	2187	63.1	406	8	ADS12866	Ads12866 Human fac
27	2187	63.1	406	8	ADS12888	Ads12888 Human fac
28	2187	63.1	407	6	ABG73123	Abg73123 Human coa
29	2187	63.1	444	2	AAR64205	Aar64205 Factor VI
30	2187	63.1	444	3	AAY67967	Aay67967 Factor VI
31	2187	63.1	444	4	AAB61992	Aab61992 Human Fac
32	2187	63.1	444	6	ABR55842	Abr55842 Human Fac
33	2187	63.1	444	7	ADC24227	Adc24227 Human NOV
34	2187	63.1	444	8	ADN49680	Adn49680 Human Fac
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36	2187	63.1	444	8	ADP12953	Adp12953 Protein e
37	2187	63.1	466	1	AAP60056	Aap60056 Factor VI
38	2187	63.1	466	2	AAR52562	Aar52562 Factor VI
39	2187	63.1	466	2	AAW69606	Aaw69606 Human Fac
40	2187	63.1	466	7	ADB36327	Adb36327 Human fac
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45	2184	63.0	406	6	AAO30547	Aao30547 Human coa

ALIGNMENTS

RESULT 1
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ID ADJ57513 standard; protein; 641 AA.
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AC ADJ57513;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human FVII-IgG1 Fc domain fusion protein.
XX
KW TF; tissue factor; FVIIa; factor VII; anticoagulant; thrombolytic;
KW cerebroprotective; cytostatic; vasotropic; antirheumatic; antiarthritic;
KW antiarteriosclerotic; antiinflammatory; antibacterial; immunosuppressive;
KW hypertensive; cardiant; human; coagulation Factor VII; immunoglobulin G1;
KW IgG1; fusion protein.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
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PD   22-JAN-2004.
XX
PF   09-JUL-2003; 2003WO-DK000481.
XX
PR   12-JUL-2002; 2002DK-00001099.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Bjorn SE,  Nicolaisen EM,  Steenstrup TD;
XX
DR   WPI; 2004-180224/17.
XX
PT   New compound binding to tissue factor, useful for treating diseases such
PT   as angiogenesis, ischemia/reperfusion, and rheumatoid arthritis.
XX
PS   Claim 17; SEQ ID NO 8; 61pp; English.
XX
CC   The invention relates to a compound (I) binding to tissue factor (TF).
CC   The compound (I) has the formula A-(LM)-C, where A is a FVIIa
CC   polypeptide, LM is an optional linker group, C comprises an
CC   immunostimulatory effector domain, and (I) binds to TF. (I) inhibits TF-
CC   mediated activated factor VII (FVIIa) activity. (I) is useful as a
CC   medicament, and for the manufacture of a medicament for preventing or
CC   treating disease or disorder associated with pathophysiological TF
CC   activity. The disease or disorder associated with pathophysiological TF
CC   activity are deep venous thrombosis, arterial thrombosis, post surgical
CC   thrombosis, coronary artery bypass graft (CABG), percutaneous transdermal
CC   coronary angioplastry (PTCA), stroke, cancer, tumor metastasis,
CC   angiogenesis, ischemia/reperfusion, rheumatoid arthritis, thrombolysis,
CC   arteriosclerosis and restenosis following angioplastry, acute and chronic
CC   indications such as inflammation, septic shock, septicemia, hypotension,
CC   adult respiratory distress syndrome (ARDS), disseminated intravascular
CC   coagulopathy (DIC), pulmonary embolism, platelet deposition, myocardial
CC   infarction, or prophylactic treatment of mammals with atherosclerotic
CC   vessels at risk for thrombosis. The present sequence represents a native
CC   human coagulation Factor VII conjugated to Fc domain of immunoglobulin G1
CC   (IgG1)
XX
SQ   Sequence 641 AA;

  Query Match             100.0%;  Score 3464;  DB 8;  Length 641;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-166;
  Matches  641;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420

Qy        421 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480

Qy        481 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 540

Qy        541 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600

Qy        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||||||||||||||||||||||||||||||||||||||||
Db        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641


RESULT 2
ADJ57516
ID   ADJ57516 standard; protein; 679 AA.
XX
AC   ADJ57516;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human FVII-IgG1 Fc domain fusion protein.
XX
KW   TF; tissue factor; FVIIa; factor VII; anticoagulant; thrombolytic;
KW   cerebroprotective; cytostatic; vasotropic; antirheumatic; antiarthritic;
KW   antiarteriosclerotic; antiinflammatory; antibacterial; immunosuppressive;
KW   hypertensive; cardiant; human; coagulation Factor VII; immunoglobulin G1;
KW   IgG1; fusion protein.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .38
FT                   /note= "alternatively spliced propeptide"
FT   Protein         39. .444
FT                   /note= "human coagulation factor VII"
FT   Misc-difference 379
FT                   /note= "encoded by GCG"
FT   Protein         445. .679
FT                   /note= "IgG1 Fc domain"
XX
PN   WO2004006962-A2.
XX
PD   22-JAN-2004.
XX
PF   09-JUL-2003; 2003WO-DK000481.
XX
PR   12-JUL-2002; 2002DK-00001099.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Bjorn SE,  Nicolaisen EM,  Steenstrup TD;
XX
DR   WPI; 2004-180224/17.
DR   N-PSDB; ADJ57517, ADJ57518.
XX
PT   New compound binding to tissue factor, useful for treating diseases such
PT   as angiogenesis, ischemia/reperfusion, and rheumatoid arthritis.
XX
PS   Example 1; SEQ ID NO 11; 61pp; English.
```

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XX
CC   The invention relates to a compound (I) binding to tissue factor (TF).
CC   The compound (I) has the formula A-(LM)-C, where A is a FVIIa
CC   polypeptide, LM is an optional linker group, C comprises an
CC   immunostimulatory effector domain, and (I) binds to TF. (I) inhibits TF-
CC   mediated activated factor VII (FVIIa) activity. (I) is useful as a
CC   medicament, and for the manufacture of a medicament for preventing or
CC   treating disease or disorder associated with pathophysiological TF
CC   activity. The disease or disorder associated with pathophysiological TF
CC   activity are deep venous thrombosis, arterial thrombosis, post surgical
CC   thrombosis, coronary artery bypass graft (CABG), percutaneous transdermal
CC   coronary angioplastry (PTCA), stroke, cancer, tumor metastasis,
CC   angiogenesis, ischemia/reperfusion, rheumatoid arthritis, thrombolysis,
CC   arteriosclerosis and restenosis following angioplastry, acute and chronic
CC   indications such as inflammation, septic shock, septicemia, hypotension,
CC   adult respiratory distress syndrome (ARDS), disseminated intravascular
CC   coagulopathy (DIC), pulmonary embolism, platelet deposition, myocardial
CC   infarction, or prophylactic treatment of mammals with atherosclerotic
CC   vessels at risk for thrombosis. The present sequence represents a native
CC   human coagulation Factor VII with alternative spliced propetide
CC   conjugated to Fc domain of immunoglobulin G1 (IgG1)
XX
SQ   Sequence 679 AA;

  Query Match             100.0%;  Score 3464;  DB 8;  Length 679;
  Best Local Similarity   98.4%;  Pred. No. 3.1e-166;
  Matches  631;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:||||:||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 458

Qy        421 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 518

Qy        481 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 578

Qy        541 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 638

Qy        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||||||||||||||||||||||||||||||||||||||||
Db        639 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 679
```

```
RESULT 3
ADJ57511
ID   ADJ57511 standard; protein; 701 AA.
XX
AC   ADJ57511;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human FVII-IgG1 Fc domain fusion protein.
XX
KW   TF; tissue factor; FVIIa; factor VII; anticoagulant; thrombolytic;
KW   cerebroprotective; cytostatic; vasotropic; antirheumatic; antiarthritic;
KW   antiarteriosclerotic; antiinflammatory; antibacterial; immunosuppressive;
KW   hypertensive; cardiant; human; coagulation Factor VII; immunoglobulin G1;
KW   IgG1; fusion protein.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .60
FT                   /note= "alternatively spliced propeptide"
FT   Protein         61. .466
FT                   /note= "human coagulation factor VII"
FT   Misc-difference 401
FT                   /note= "encoded by GCG"
FT   Protein         467. .701
FT                   /note= "IgG1 Fc domain"
XX
PN   WO2004006962-A2.
XX
PD   22-JAN-2004.
XX
PF   09-JUL-2003; 2003WO-DK000481.
XX
PR   12-JUL-2002; 2002DK-00001099.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Bjorn SE,  Nicolaisen EM,  Steenstrup TD;
XX
DR   WPI; 2004-180224/17.
DR   N-PSDB; ADJ57514, ADJ57515.
XX
PT   New compound binding to tissue factor, useful for treating diseases such
PT   as angiogenesis, ischemia/reperfusion, and rheumatoid arthritis.
XX
PS   Disclosure; SEQ ID NO 6; 61pp; English.
XX
CC   The invention relates to a compound (I) binding to tissue factor (TF).
CC   The compound (I) has the formula A-(LM)-C, where A is a FVIIa
CC   polypeptide, LM is an optional linker group, C comprises an
CC   immunostimulatory effector domain, and (I) binds to TF. (I) inhibits TF-
CC   mediated activated factor VII (FVIIa) activity. (I) is useful as a
CC   medicament, and for the manufacture of a medicament for preventing or
CC   treating disease or disorder associated with pathophysiological TF
CC   activity. The disease or disorder associated with pathophysiological TF
CC   activity are deep venous thrombosis, arterial thrombosis, post surgical
CC   thrombosis, coronary artery bypass graft (CABG), percutaneous transdermal
CC   coronary angioplastry (PTCA), stroke, cancer, tumor metastasis,
CC   angiogenesis, ischemia/reperfusion, rheumatoid arthritis, thrombolysis,
CC   arteriosclerosis and restenosis following angioplastry, acute and chronic
CC   indications such as inflammation, septic shock, septicemia, hypotension,
CC   adult respiratory distress syndrome (ARDS), disseminated intravascular
CC   coagulopathy (DIC), pulmonary embolism, platelet deposition, myocardial
CC   infarction, or prophylactic treatment of mammals with atherosclerotic
CC   vessels at risk for thrombosis. The present sequence represents a native
CC   human coagulation Factor VII with alternative spliced propetide
CC   conjugated to Fc domain of immunoglobulin G1 (IgG1)
XX
SQ   Sequence 701 AA;

  Query Match             100.0%;  Score 3464;  DB 8;  Length 701;
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  Best Local Similarity   98.4%;  Pred. No. 3.1e-166;
  Matches  631;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:|||||||||||||||||||||||||
Db         61 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 120

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 180

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 240

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 300

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 360

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 420

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 480

Qy        421 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 540

Qy        481 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 600

Qy        541 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 660

Qy        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||||||||||||||||||||||||||||||||||||||||
Db        661 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 701


RESULT 4
AAR35764
ID   AAR35764 standard; protein; 406 AA.
XX
AC   AAR35764;
XX
DT   25-MAR-2003  (revised)
DT   24-SEP-1993  (first entry)
XX
DE   Factor VII (VII).
XX
KW   PC; protein C; IX; Factor IX; X; Factor X; PT; prothrombin; VII;
KW   Factor VII; CT; chymotrypsinogen; SP; serine protease; binding; exosite;
KW   catalytic activity.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Region          1. .152
FT                   /note= "Factor VII light chain"
FT   Region          153. .406
FT                   /note= "Factor VII heavy chain"
FT   Peptide         245. .266
FT                   /note= "claim 9, page 138-139 describes an antibody that
FT                   reacts with Factor VII; fragments 289-304, 290-304, 290-
FT                   310, 374-388 and 400-414 but not with fragment 245-266"
FT   Peptide         289. .304
FT                   /note= "pref. PC polypeptide; claim 4, page 137"
FT   Peptide         290. .310
FT                   /note= "exosite 2"
FT   Peptide         290. .310
FT                   /note= "pref. PC polypeptide; claim 2, page 136"
FT   Peptide         290. .304
FT                   /note= "pref. PC polypeptide; claim 4, page 137"
FT   Peptide         374. .388
FT                   /note= "exosite 1"
FT   Peptide         374. .388
FT                   /note= "pref. PC polypeptide; claim 2, page 136"
XX
PN   WO9309804-A1.
XX
PD   27-MAY-1993.
XX
PF   18-NOV-1992;   92WO-US010242.
XX
PR   18-NOV-1991;   91US-00793989.
XX
PA   (SCRI ) SCRIPPS RES INST.
XX
PI   Griffin JH,  Mesters RM;
XX
DR   WPI; 1993-182244/22.
XX
PT   Serine protease derived-polypeptide(s) and anti-peptide antibodies - for
PT   inhibiting coagulation and assaying for the presence of serine protease
PT   in fluid samples.
XX
PS   Disclosure; Page 133-135; 149pp; English.
XX
CC   The PC polypeptides indicated in the Features Table inhibit coagulation
CC   (they prevent binding of serine protease to natural substrates), esp.
CC   when admin. to give an intravascular blood concn. of 0.1-100 (pref. 0.5-
CC   10) microM. NB: Sequences corresp. to SEQ ID NO 6, 7, 8 and 9 are
CC   described in the specification but have not yet been added to the
CC   SEQUENCE LISTING. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 2;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 2.8e-102;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:|||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
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Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406

RESULT 5
AAB84866
ID   AAB84866 standard; protein; 406 AA.
XX
AC   AAB84866;
XX
DT   31-JUL-2001  (first entry)
XX
DE   Wild-type human blood coagulant factor VII (FVII).
XX
KW   Human; haemostatic; blood coagulant factor VII; FVII; haemophilia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  159. .164
XX
PN   JP2001061479-A.
XX
PD   13-MAR-2001.
XX
PF   24-AUG-1999;   99JP-00237610.
XX
PR   24-AUG-1999;   99JP-00237610.
XX
PA   (KAGA ) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
XX
DR   WPI; 2001-310677/33.
DR   N-PSDB; AAH19459.
XX
PT   Mutant of blood coagulant factor VII, used for substitution therapy in
PT   the treatment of hemophilia.
XX
PS   Disclosure; Page 8-9; 29pp; Japanese.
XX
CC   The present invention relates to mutants of blood coagulant factor VII
CC   (FVII) or activated blood coagulant factor VII (FVIIa). The present
CC   sequence represents the protein sequence for wild-type human FVII. The
CC   mutants can be used as an agent for the substitution therapy of
CC   haemophilia inhibitor patients
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 4;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 2.8e-102;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|::||::||||::||:|||||:||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              ||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406

RESULT 6
AAM52172
ID   AAM52172 standard; protein; 406 AA.
XX
AC   AAM52172;
XX
DT   07-FEB-2002  (first entry)
XX
DE   Mammalian expressed human FVII SEQ ID NO 3.
XX
KW   Factor VII; FVII; Factor VIIa; FVIIa; haemostatic; thrombolytic;
KW   cardiant; hepatotrophic; cerebroprotective; haemophilia; liver disease;
KW   myocardial infarction; thrombotic stroke; deep-vein thrombosis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   52
FT                   /note= "O-glycosylated"
FT   Modified-site   60
FT                   /note= "O-glycosylated"
FT   Modified-site   145
FT                   /note= "N-glycosylated"
FT   Cleavage-site   152. .153
FT                   /note= "proteolytic cleavage site converting FVII zymogen
FT                   to an activated form, comprising two chains linked by a
FT                   single disulphide bridge"
FT   Modified-site   322
FT                   /note= "N-glycosylated"
XX
PN   WO200158935-A2.
XX
PD   16-AUG-2001.
XX
PF   12-FEB-2001; 2001WO-DK000094.
XX
PR   11-FEB-2000; 2000DK-00000218.
PR   18-OCT-2000; 2000DK-00001558.
XX
PA   (MAXY-) MAXYGEN APS.
XX
PI   Andersen KV,  Pedersen AH,  Bornaes C;
XX
DR   WPI; 2001-581807/65.
DR   N-PSDB; AAI99983.
XX
PT   New conjugate, useful for treating Factor VIIa related diseases or
PT   disorders such as hemophilia, liver disease, myocardial infarction and
PT   deep-vein thrombosis, comprises non-polypeptide group covalently attached
PT   to polypeptide group.
XX
PS   Disclosure; Page 85-86; 89pp; English.
XX
CC   The invention relates to novel Factor VII (FVII) or Factor VIIa (FVIIa)
CC   polypeptide conjugates, comprising at least one non-polypeptide group
CC   covalently attached to a polypeptide, where the amino acid sequence of
CC   polypeptide differs from that of the wildtype FVIIa (AAM52171) in that at
CC   least one amino acid residue containing an attachment group for the non-
CC   polypeptide group has been introduced or removed. The FVIIa conjugates
CC   have haemostatic, thrombolytic, cardiant, hepatotrophic and
CC   cerebroprotective activity and are useful for treating FVIIa/TF-related
CC   diseases or disorders such as haemophilia, liver disease, myocardial
CC   infarction, thrombotic stroke and deep-vein thrombosis. The conjugates
CC   have increased functional in vivo half life and/or increased plasma half
CC   life, increased bioavailability and or reduced sensitivity to proteolytic
CC   degradation. Consequently medical treatment using the conjugates has a
CC   number of advantages over currently available such as longer duration
```

```
CC   between injections
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 4;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 2.8e-102;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||:|:||::||||::||:|||||:|||||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSPEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 7
AAM52171
ID   AAM52171 standard; protein; 406 AA.
XX
AC   AAM52171;
XX
DT   07-FEB-2002  (first entry)
XX
DE   Human FVII SEQ ID NO 1.
XX
KW   Factor VII; FVII; Factor VIIa; FVIIa; haemostatic; thrombolytic;
KW   cardiant; hepatotrophic; cerebroprotective; haemophilia; liver disease;
KW   myocardial infarction; thrombotic stroke; deep-vein thrombosis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 6
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 7
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 14
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 16
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 19
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 20
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 25
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 26
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 29
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Misc-difference 35
FT                   /label= Glu, OTHER
FT                   /note= "OTHER = gamma carboxyglutamic acid"
FT   Modified-site   52
FT                   /note= "O-glycosylated"
FT   Modified-site   60
FT                   /note= "O-glycosylated"
FT   Modified-site   145
FT                   /note= "N-glycosylated"
FT   Cleavage-site   152. .153
FT                   /note= "proteolytic cleavage site converting FVII zymogen
FT                   to an activated form, comprising two chains linked by a
FT                   single disulphide bridge"
FT   Modified-site   322
FT                   /note= "N-glycosylated"
XX
PN   WO200158935-A2.
XX
PD   16-AUG-2001.
XX
PF   12-FEB-2001; 2001WO-DK000094.
XX
PR   11-FEB-2000; 2000DK-00000218.
PR   18-OCT-2000; 2000DK-00001558.
XX
PA   (MAXY-) MAXYGEN APS.
XX
PI   Andersen KV,  Pedersen AH,  Bornaes C;
XX
DR   WPI; 2001-581807/65.
DR   N-PSDB; AAI99982.
XX
PT   New conjugate, useful for treating Factor VIIa related diseases or
PT   disorders such as hemophilia, liver disease, myocardial infarction and
PT   deep-vein thrombosis, comprises non-polypeptide group covalently attached
PT   to polypeptide group.
XX
PS   Claim 1; Page 81-83; 89pp; English.
XX
CC   The invention relates to novel Factor VII (FVII) or Factor VIIa (FVIIa)
CC   polypeptide conjugates, comprising at least one non-polypeptide group
CC   covalently attached to a polypeptide, where the amino acid sequence of
CC   polypeptide differs from that of the wildtype FVIIa (AAM52171) in that at
CC   least one amino acid residue containing an attachment group for the non-
CC   polypeptide group has been introduced or removed. The FVIIa conjugates
CC   have haemostatic, thrombolytic, cardiant, hepatotrophic and
CC   cerebroprotective activity and are useful for treating FVIIa/TF-related
CC   diseases or disorders such as haemophilia, liver disease, myocardial
CC   infarction, thrombotic stroke and deep-vein thrombosis. The conjugates
CC   have increased functional in vivo half life and/or increased plasma half
CC   life, increased bioavailability and or reduced sensitivity to proteolytic
CC   degradation. Consequently medical treatment using the conjugates has a
CC   number of advantages over currently available such as longer duration
CC   between injections
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 4;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-102;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
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```
Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
```

RESULT 8
AAU77188
ID AAU77188 standard; protein; 406 AA.
XX
AC AAU77188;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human coagulation Factor VII protein.
XX
KW Human; coagulation factor VII; haemostatic; bleeding disorder;
KW clotting factor deficiency; haemophilia; defective platelet function;
KW thrombocytopenia; von Willebrand's disease; tissue factor.
XX
OS Homo sapiens.
XX

FH	Key	Location/Qualifiers
FT	Domain	1. .37
FT		/note= "N-terminal GLA-domain"
FT	Modified-site	6
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	7
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	14
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	16
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	19
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	20
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	25
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	26
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	29
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Modified-site	35
FT		/note= "4-carboxyglutamic acid (gamma-carboxyglutamate)"
FT	Domain	153. .406
FT		/note= "Protease domain"

XX
PN WO200222776-A2.
XX
PD 21-MAR-2002.
XX
PF 13-SEP-2001; 2001WO-DK000596.
XX
PR 13-SEP-2000; 2000DK-00001361.
PR 29-SEP-2000; 2000US-0236455P.
XX
PA (NOVO) NOVO NORDISK AS.
XX
PI Persson E, Olsen OH;
XX
DR WPI; 2002-351879/38.
XX
PT New human coagulation factor VII variants having coagulant activity,
PT useful for treatment or prophylaxis of bleeding disorders in a subject or
PT for enhancing normal hemostatic system.
XX
PS Claim 1; Fig 1; 64pp; English.
XX
CC The invention relates to the human coagulation Factor VII polypeptide and
CC variants of the amino acid sequence. The protein of the invention is
CC useful for preparing for medicament for treating a bleeding episode or
CC for the enhancement of the normal haemostatic system. The protein is
CC useful for treatment of bleeding disorders in a subject or for the
CC enhancement of the normal haemostatic system. The factor VII variants may
CC be used to control bleeding disorders which have several causes such as
CC clotting factor deficiencies (e.g., haemophilia A and B or deficiency of
CC coagulation factors XI or VII) or clotting factor inhibitors, or they may
CC be used to control excessive bleeding occurring in subjects with a
CC normally functioning blood clotting cascade (no clotting factor
CC deficiencies or inhibitors against any of the coagulation factors). The
CC bleedings may be caused by a defective platelet function,
CC thrombocytopenia or von Willebrand's disease. Factor VIIa variants
CC exhibit an inherent activity which may be therapeutically useful in
CC situations where the procoagulant activity is independent of tissue
CC factor. This sequence represents the human coagulation factor VII
CC polypeptide
XX
SQ Sequence 406 AA;

Query Match 63.1%; Score 2187; DB 5; Length 406;
Best Local Similarity 100.0%; Pred. No. 2.8e-102;
Matches 406; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
```

RESULT 9
ABG31688
ID ABG31688 standard; peptide; 406 AA.
XX

```
AC   ABG31688;
XX
DT   05-NOV-2002  (first entry)
XX
DE   Human coagulation Factor VII.
XX
KW   Vitamin K-dependent protein; haemostatic; coagulation Factor VII;
KW   haemophilia; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   6. .7
FT                   /label= OTHER
FT                   /note= "OTHER= Gamma carboxylated glutamate"
FT   Modified-site   14
FT                   /label= OTHER
FT                   /note= "OTHER= Gamma carboxylated glutamate"
FT   Modified-site   16
FT                   /label= OTHER
FT                   /note= "OTHER= Gamma carboxylated glutamate"
FT   Modified-site   19. .20
FT                   /label= OTHER
FT                   /note= "OTHER= Gamma carboxylated glutamate"
FT   Modified-site   25. .26
FT                   /label= OTHER
FT                   /note= "OTHER= Gamma carboxylated glutamate"
FT   Modified-site   29
FT                   /label= OTHER
FT                   /note= "OTHER= Gamma carboxylated glutamate"
FT   Modified-site   35
FT                   /label= OTHER
FT                   /note= "OTHER= Gamma carboxylated glutamate"
FT   Modified-site   52
FT                   /label= OTHER
FT                   /note= "OTHER= Glycosylated serine"
FT   Modified-site   60
FT                   /label= OTHER
FT                   /note= "OTHER= Glycosylated serine"
FT   Modified-site   145
FT                   /label= OTHER
FT                   /note= "OTHER= Glycosylated serine"
FT   Modified-site   322
FT                   /label= OTHER
FT                   /note= "OTHER= Glycosylated serine"
XX
PN   WO200229045-A2.
XX
PD   11-APR-2002.
XX
PF   02-OCT-2001; 2001WO-DK000635.
XX
PR   02-OCT-2000; 2000DK-00001456.
PR   10-OCT-2000; 2000US-0238944P.
PR   16-FEB-2001; 2001DK-00000262.
PR   26-FEB-2001; 2001US-0271581P.
PR   14-MAR-2001; 2001DK-00000430.
PR   16-MAR-2001; 2001US-0276322P.
PR   14-MAY-2001; 2001DK-00000751.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Nicolaisen EM,  Nielsen LS;
XX
DR   WPI; 2002-608175/65.
XX
PT   Producing a vitamin K-dependent protein, such as Factor VII, comprises
PT   transfection of a host cell with a first propeptide and a second free
PT   propeptide.
XX
PS   Disclosure; Fig 1; 51pp; English.
XX
CC   The invention relates to a method for producing a vitamin K-dependent
CC   protein comprising transfection of a eukaryotic host cell with a first
CC   polynucleotide encoding a first propeptide in a first expression unit and
CC   a second polynucleotide encoding a second free propeptide in a second
CC   expression unit to produce a co-transfected host cell. The method
CC   produces a vitamin K-dependent protein such as coagulation Factor VII, by
CC   genetic recombinant techniques. The vitamin K-dependent proteins can be
CC   used to treat certain types of haemophilia, such as Haemophilia A or B.
CC   This sequence represents the human coagulation Factor VII polypeptide
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 5;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 2.8e-102;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 10
ABB09178
ID   ABB09178 standard; protein; 406 AA.
XX
AC   ABB09178;
XX
DT   03-JUL-2002  (first entry)
XX
DE   Human Factor VII amino acid sequence.
XX
KW   Human; Factor VII; coagulation; Factor VIIa; bleeding; clotting factor;
KW   defective platelet function; bleeding disorder; haemophilia;
KW   von Willebrand's disease; haemorrhagic gastritis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   6
FT                   /note= "gamma-carboxyglutamate"
FT   Modified-site   7
FT                   /note= "gamma-carboxyglutamate"
FT   Modified-site   14
FT                   /note= "gamma-carboxyglutamate"
FT   Modified-site   16
FT                   /note= "gamma-carboxyglutamate"
FT   Modified-site   19
FT                   /note= "gamma-carboxyglutamate"
FT   Modified-site   20
FT                   /note= "gamma-carboxyglutamate"
```

```
FT   Modified-site   25
FT                   /note= "gamma-carboxyglutamate"
FT   Modified-site   26
FT                   /note= "gamma-carboxyglutamate"
FT   Modified-site   29
FT                   /note= "gamma-carboxyglutamate"
FT   Modified-site   35
FT                   /note= "gamma-carboxyglutamate"
XX
PN   WO200182943-A2.
XX
PD   08-NOV-2001.
XX
PF   03-MAY-2001; 2001WO-DK000302.
XX
PR   03-MAY-2000; 2000DK-00000734.
PR   13-SEP-2000; 2000DK-00001360.
PR   13-SEP-2000; 2000DK-00001361.
PR   22-MAR-2001; 2001DK-00000477.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Johannessen M,  Nordfang OJ,  Jansen JA;
XX
DR   WPI; 2002-055422/07.
XX
PT   Use of Factor VIIa in the manufacture of a medicament for treating a
PT   condition affectable by Factor VIIa.
XX
PS   Disclosure; Fig 3; 26pp; English.
XX
CC   The present sequence represents an amino acid sequence of native human
CC   coagulation Factor VII. The present invention describes a Factor VIIa
CC   which is used in the manufacture of a medicament for treating a condition
CC   affectable by Factor VIIa. Factor VIIa can be used for the manufacture of
CC   a medicament for treating a condition affectable by Factor VIIa such as
CC   bleeding caused by lack of or defective coagulation Factors VIII, IX or
CC   VII or inhibitors against coagulation Factors VIII, IX or VII, bleeding
CC   caused by a defective platelet function, bleeding associated with
CC   excessive tissue damage or trauma, to control bleeding disorders caused
CC   by clotting factor deficiencies (haemophilia A and B) or clotting factor
CC   inhibitors or bleeding disorders in patients suffering from von
CC   Willebrand's diseases, in situations such as diffuse bleeding, in
CC   haemorrhagic gastritis and profuse uterine bleeding, for the treatment of
CC   bleeding in brain, inner ear region, eyes as well as in association with
CC   the process of taking biopsies from various organs and in laproscopic
CC   surgery in mammals, preferably human beings
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 5;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 2.8e-102;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||:|:||::||||::||:|||||:||||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 11
ABB80051
ID   ABB80051 standard; protein; 406 AA.
XX
AC   ABB80051;
XX
DT   27-AUG-2002  (first entry)
XX
DE   Human coagulation factor VII wild-type amino acid sequence.
XX
KW   Human; coagulation factor VII; coagulant; haemostatic; bleeding;
KW   prophylactic; clotting factor deficiency; haemophilia;
KW   coagulation factor XI; platelet; thrombocytopaenia; uterine bleeding;
KW   von Willebrand's disease; laproscopic surgery; haemorrhagic gastritis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Domain          1. .37
FT                   /label= N-terminal GLA domain
FT                   /note= "GLA is gamma-carboxyglutaminc acid"
FT   Modified-site   6
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   7
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   14
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   16
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   19
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   20
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   25
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   26
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   29
FT                   /note= "gamma-carboxyglutamic acid"
FT   Modified-site   35
FT                   /note= "gamma-carboxyglutamic acid"
XX
PN   WO200183725-A1.
XX
PD   08-NOV-2001.
XX
PF   01-MAY-2001; 2001WO-DK000294.
XX
PR   03-MAY-2000; 2000DK-00000734.
PR   13-SEP-2000; 2000DK-00001360.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Persson E,  Olsen OH;
XX
DR   WPI; 2002-049347/06.
XX
PT   New human coagulation factor VII variants having coagulant activity for
PT   use in treatment or prophylaxis of coagulation or bleeding disorders.
XX
PS   Example 1; Fig 1; 47pp; English.
XX
CC   The invention relates to a human coagulation factor VII variants having
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CC   coagulant and haemostatic activity. Nucleic acid constructs of the
CC   invention are useful as a medicament for treatment or prophylaxis of
CC   bleeding episodes or for the enhancement of the normal haemostatic
CC   system. A transgenic animal or plant expressing a variant of the
CC   invention is useful for producing such variants. They may also be useful
CC   for preventing or treating coagulation or bleeding disorders, including
CC   clotting factor deficiencies (haemophilia A and B, deficiency of
CC   coagulation factors XI or VII), excessive bleeding caused by defective
CC   platelet function, thrombocytopaenia or von Willebrand's disease,
CC   laproscopic surgery, haemorrhagic gastritis, or profuse uterine bleeding.
CC   Variants of the invention have increased tissue factor-independent
CC   activity compared to native human coagulation factor VII, not accompanied
CC   by changes in substrate specificity. The current sequence represents the
CC   human coagulation factor VII wild-type amino acid sequence
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 5;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-102;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 12
ABG73119
ID   ABG73119 standard; protein; 406 AA.
XX
AC   ABG73119;
XX
DT   11-MAR-2003  (first entry)
XX
DE   Human coagulation Factor VII zymogen polypeptide.
XX
KW   Human; coagulation; Factor VII; Factor VIIa; blood coagulation;
KW   fibrin clot; haemostatic; tissue factor; zymogen; Factor IX; Factor X;
KW   prothrombin; thrombin; Factor V; Factor VIII; fibrinogen; fibrin;
KW   plasma factor; bleeding episode; haemophilia A; haemophilia B; thrombus;
KW   intimal hyperplasia; restenosis; cardiogenic embolism; stroke;
KW   platelet deposition; percutaneous transdermal coronary angioplasty; PTCA;
KW   cancer; tumour; angiogenesis; ischaemia; reperfusion; thrombolysis;
KW   rheumatoid arthritis; arteriosclerosis; inflammation; septic shock;
KW   hypotension; adult respiratory distress syndrome; ARDS;
KW   myocardial infarction; vasotropic; cerebroprotective; antibacterial;
KW   immunosuppressive; cardiant; gene therapy.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Protein         1. .152
FT                   /note= "Forms one chain of the activated two-chain Factor
FT                   VII (FVIIa) when Factor VII is cleaved between residues
FT                   152 and 153"
FT   Modified-site   6. .7
FT                   /label= OTHER
FT                   /note= "OTHER = gamma carboxylated glutamic acid"
FT   Modified-site   14
FT                   /label= OTHER
FT                   /note= "OTHER = gamma carboxylated glutamic acid"
FT   Modified-site   16
FT                   /label= OTHER
FT                   /note= "OTHER = gamma carboxylated glutamic acid"
FT   Modified-site   19. .20
FT                   /label= OTHER
FT                   /note= "OTHER = gamma carboxylated glutamic acid"
FT   Modified-site   25. .26
FT                   /label= OTHER
FT                   /note= "OTHER = gamma carboxylated glutamic acid"
FT   Modified-site   29
FT                   /label= OTHER
FT                   /note= "OTHER = gamma carboxylated glutamic acid"
FT   Modified-site   35
FT                   /label= OTHER
FT                   /note= "OTHER = gamma carboxylated glutamic acid"
FT   Disulfide-bond  50. .61
FT   Modified-site   52
FT                   /note= "Ser is N-glycosylated"
FT   Disulfide-bond  55. .70
FT   Modified-site   60
FT                   /note= "Ser is N-glycosylated"
FT   Disulfide-bond  72. .81
FT   Disulfide-bond  91. .102
FT   Disulfide-bond  98. .112
FT   Disulfide-bond  114. .127
FT   Disulfide-bond  135. .262
FT   Modified-site   145
FT                   /note= "Asn is N-glycosylated"
FT   Cleavage-site   152. .153
FT   Protein         153. .406
FT                   /note= "Forms one chain of the activated two-chain Factor
FT                   VII (FVIIa) when Factor VII is cleaved between residues
FT                   152 and 153"
FT   Disulfide-bond  159. .164
FT   Disulfide-bond  178. .194
FT   Disulfide-bond  310. .329
FT   Modified-site   322
FT                   /note= "Asn is N-glycosylated"
FT   Disulfide-bond  340. .368
XX
PN   WO200277218-A1.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-DK000189.
XX
PR   22-MAR-2001; 2001DK-00000477.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Persson E;
XX
DR   WPI; 2003-058374/05.
XX
PT   Novel factor VII polypeptide, its derivatives useful for preparing
PT   medicament for treating bleeding episodes, or for enhancing normal
PT   hemostatic system, especially for treating hemophilia.
XX
PS   Claim 1; Fig 1; 96pp; English.
XX
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CC   The invention discloses a human factor VII polypeptide, or a variant or
CC   derivative of it, where an amino acid has been modified. This change
CC   results in a polypeptide with the same or an increased activity when
CC   compared to recombinant wild type human Factor VIIa. Blood coagulation
CC   consists of a complex interaction of various blood components that
CC   eventually give rise to a fibrin clot. Initiation of the haemostatic
CC   process is mediated by the formation of a complex between tissue factor
CC   and Factor VIIa (the active form of the Factor VII zymogen). This complex
CC   activates Factors IX and X, converting prothrombin to thrombin, which
CC   activates Factors V and VIII leading to a full thrombin burst. The
CC   thrombin converts fibrinogen to fibrin resulting in formation of a fibrin
CC   clot. The Factor VII zymogen, or its derivative, can be modified in its
CC   catalytic centre to inhibit the ability of the Factor VII polypeptide to
CC   activate plasma factor X or IX. The factor VII derivative is useful for
CC   preparing a medicament for the treatment of bleeding episodes, for the
CC   enhancement of the normal haemostatic system, especially for the
CC   treatment of haemophilia A or B and for inhibiting thrombus formation.
CC   The inactivated factor VII derivatives are useful for treating intimal
CC   hyperplasia, restenosis, cardiogenic emboli, platelet deposition
CC   disorders, percutaneous transdermal coronary angioplasty (PTCA), stroke,
CC   cancer, tumour metastasis, angiogenesis, ischaemia/reperfusion,
CC   rheumatoid arthritis, thrombolysis, arteriosclerosis, acute and chronic
CC   indications, such as inflammation, septic shock, hypotension, adult
CC   respiratory distress syndrome (ARDS) and myocardial infarction. The
CC   sequence presented is the inactivated human coagulation Factor VII
CC   zymogen polypeptide
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 6;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-102;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 13
ABR63283
ID   ABR63283 standard; protein; 406 AA.
XX
AC   ABR63283;
XX
DT   29-AUG-2003  (first entry)
XX
DE   Wild type human coagulation factor VII.
XX
KW   Human; coagulation factor VII; haemostatic; bleeding disorder;
KW   haemophilia A; haemophilia B.
XX
OS   Homo sapiens.
XX
PN   WO2003027147-A2.
XX
PD   03-APR-2003.
XX
PF   26-SEP-2002; 2002WO-DK000635.
XX
PR   27-SEP-2001; 2001DK-00001413.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Persson E,  Olsen OH;
XX
DR   WPI; 2003-402973/38.
XX
PT   New human coagulation Factor VIIa polypeptide, useful for treating
PT   bleeding disorders or episodes (e.g. hemophilia A or B) or for enhancing
PT   the normal hemostatic system, comprises at least 2 substitutions in its
PT   amino acid sequence.
XX
PS   Claim 5; Fig 1; 54pp; English.
XX
CC   The present invention relates to a factor VII polypeptide, haemostatic in
CC   its action. The polypeptide is useful as a medicament or in preparing a
CC   medicament for the treatment of bleeding disorders or bleeding episodes
CC   or for the enhancement of the normal haemostatic system. The polypeptide
CC   is particularly used for the treatment of haemophilia A or B. The present
CC   sequence represents the wild type human coagulation factor VII
CC   polypeptide
XX
SQ   Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 6;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-102;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 14
AAO30527
ID   AAO30527 standard; protein; 406 AA.
XX
AC   AAO30527;
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XX
DT  22-SEP-2003  (first entry)
XX
DE  Human wild type coagulation factor VII protein.
XX
KW  Human; coagulation factor VII; coagulant; medicament; bleeding disorder;
KW  haemophilia; haemostatic system; gene therapy.
XX
OS  Homo sapiens.
XX
FH  Key             Location/Qualifiers
FT  Domain          1. .37
FT                  /note= "Gamma-carboxy glutamate (GLA) domain"
FT  Modified-site   6
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   7
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   14
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   16
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   19
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   20
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   25
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   26
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   29
FT                  /note= "Gamma-carboxy glutamate"
FT  Modified-site   35
FT                  /note= "Gamma-carboxy glutamate"
FT  Domain          153. .406
FT                  /note= "Protease domain"
FT  Region          313. .329
FT                  /note= "Loop region"
XX
PN  WO2003037932-A2.
XX
PD  08-MAY-2003.
XX
PF  01-NOV-2002; 2002WO-DK000726.
XX
PR  02-NOV-2001; 2001DK-00001627.
XX
PA  (NOVO ) NOVO NORDISK AS.
XX
PI  Persson E,  Olsen OH;
XX
DR  WPI; 2003-430502/40.
XX
PT  New Factor VII polypeptide, useful for preparing a medicament for
PT  treating bleeding disorders, e.g. hemophilia A or B, or bleeding episodes
PT  and for the enhancement of the normal hemostatic system.
XX
PS  Claim 1; Fig 1; 53pp; English.
XX
CC  The present invention relates to human coagulation factor VII variants
CC  having coagulant activity and polynucleotides encoding such variants.
CC  Sequences of the invention are useful for preparing medicaments for
CC  treating bleeding disorders, e.g. haemophilia A or B or bleeding episodes
CC  and for the enhancement of the normal haemostatic system. They are also
CC  useful in gene therapy. The present sequence is human wild type
CC  coagulation factor VII protein
XX
SQ  Sequence 406 AA;

  Query Match             63.1%;  Score 2187;  DB 6;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-102;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
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Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
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Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
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Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
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Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
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Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 15
ADD02791
ID  ADD02791 standard; protein; 406 AA.
XX
AC  ADD02791;
XX
DT  01-JAN-2004  (first entry)
XX
DE  Human factor VIIa (fVIIa) #SEQ ID 1.
XX
KW  Vasotropic; antidiabetic; ophthalmological; antirheumatic; antiarthritic;
KW  dermatological; antiinflammatory; cytostatic; factor VIIa; fVIIa;
KW  curcuminoid; tumour; hypercoagulapathy; restenosis; diabetic retinopathy;
KW  rheumatoid arthritis; skin disorder; inflammation; cancer; leukaemia;
KW  breast cancer; lung cancer; liver cancer; melanoma; prostrate cancer.
XX
OS  Homo sapiens.
XX
FH  Key             Location/Qualifiers
FT  Misc-difference 153. .406
FT                  /note= "region specifically referred to in claim 4"
XX
PN  WO2003075847-A2.
XX
PD  18-SEP-2003.
XX
PF  07-MAR-2003; 2003WO-US007043.
XX
PR  08-MAR-2002; 2002US-0362762P.
XX
PA  (UYEM-) UNIV EMORY.
XX
PI  Shoji M,  Synder J,  Liotta DC,  Sun A;
XX
DR  WPI; 2003-902745/82.
XX
PT  Composition useful for the treatment of pathological condition e.g.
PT  restenosis, diabetic retinopathy and cancer comprises a protein, at least
PT  one linker and a cytotoxic compound.
XX
PS  Claim 4; SEQ ID NO 1; 81pp; English.
XX
CC  The invention relates to a composition that comprises a protein
CC  selectively binding a surface marker of a target cell, at least one
CC  linker covalently bonded to the protein and a cytotoxic compound bonded
```

CC to the linker by a hydrolysable bond. The protein selectively binds to a
CC tissue factor on the surface of the target cell and is capable of being
CC internalised by the target cell. The protein is a component polypeptide
CC of a factor VIIa and the polypeptide comprises the amino acid sequence
CC (preferably His193) as given in the specification or its truncated or
CC modified variant. The fluorinated curcuminoid 3,5-Bis-(2-fluoro-
CC benzylidene)-piperidin-4-one (EF24) was 10 times more effective than
CC either cisplatin or curcumin when tested against tumour cells in the NCI
CC screening system. The composition of the invention is useful for
CC modulating a pathological condition and proliferation of the cell in the
CC treatment of e.g. hypercoagulapathy, restenosis, diabetic retinopathy,
CC rheumatoid arthritis, skin disorder inflammation and cancer (e.g.
CC leukaemia, breast cancer, lung cancer, liver cancer, melanoma and
CC prostrate cancer). The composition is antiangiogenic and reduces the
CC proliferation of a target cell thus causing reduction in a tumour. It
CC also increases the efficacy of the cytotoxic agent and decreases the side
CC effects by delivering the agent to target cells by binding the
CC composition to the surface maker on the target cells as the composition
CC is internalised by the target cell. The current sequence represents the
CC human factor VIIa (fVIIa) amino acid sequence.
XX
SQ Sequence 406 AA;

Query Match 63.1%; Score 2187; DB 7; Length 406;
Best Local Similarity 97.5%; Pred. No. 2.8e-102;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
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Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
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Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
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Search completed: February 10, 2005, 05:42:32
Job time : 103.592 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 10, 2005, 05:43:30 ; Search time 592.539 Seconds
(without alignments)
353.472 Million cell updates/sec

Title: US-10-617-619A-8
Perfect score: 3464
Sequence: 1 ANAFLXXLRPGSLXRXCKXX.....MHEALHNHYTQKSLSLSPGK 641

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 1376875 seqs, 326749119 residues

Total number of hits satisfying chosen parameters: 1376875

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	3464	100.0	641	16	US-10-617-619-8	Sequence 8, Appli
2	3464	100.0	679	16	US-10-617-619-11	Sequence 11, Appl
3	3464	100.0	701	16	US-10-617-619-6	Sequence 6, Appli
4	2187	63.1	406	10	US-09-782-587B-1	Sequence 1, Appli
5	2187	63.1	406	10	US-09-782-587B-3	Sequence 3, Appli
6	2187	63.1	406	14	US-10-109-498-1	Sequence 1, Appli
7	2187	63.1	406	14	US-10-255-032-1	Sequence 1, Appli
8	2187	63.1	406	14	US-10-281-727-1	Sequence 1, Appli
9	2187	63.1	406	15	US-10-386-898-7	Sequence 7, Appli
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26	2187	63.1	444	16	US-10-287-994-8	Sequence 8, Appli
27	2187	63.1	444	16	US-10-410-913-8	Sequence 8, Appli
28	2187	63.1	444	16	US-10-738-777-3	Sequence 3, Appli
29	2187	63.1	459	16	US-10-741-601-503	Sequence 503, App
30	2187	63.1	459	16	US-10-741-601-504	Sequence 504, App
31	2187	63.1	466	14	US-10-017-122-2	Sequence 2, Appli
32	2187	63.1	466	15	US-10-375-741-14	Sequence 14, Appl
33	2187	63.1	481	16	US-10-741-601-501	Sequence 501, App
34	2187	63.1	481	16	US-10-741-601-502	Sequence 502, App
35	2183	63.0	405	15	US-10-360-101-225	Sequence 225, App
36	2113	61.0	426	10	US-09-951-121A-1	Sequence 1, Appli
37	2113	61.0	426	10	US-09-848-107-1	Sequence 1, Appli
38	2113	61.0	426	14	US-10-295-682-1	Sequence 1, Appli
39	2111	60.9	396	16	US-10-700-778-1	Sequence 1, Appli
40	1876.5	54.2	419	15	US-10-382-248-36	Sequence 36, Appl
41	1381	39.9	255	15	US-10-600-187-7	Sequence 7, Appli
42	1376	39.7	254	11	US-09-789-210-50	Sequence 50, Appl
43	1318.5	38.1	977	9	US-09-733-764-1	Sequence 1, Appli
44	1318.5	38.1	977	14	US-10-357-653-1	Sequence 1, Appli
45	1306	37.7	704	9	US-09-733-764-2	Sequence 2, Appli

ALIGNMENTS

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RESULT 1
US-10-617-619-8
; Sequence 8, Application US/10617619
; Publication No. US20040110929A1
; GENERAL INFORMATION:
;  APPLICANT: Bjorn, Soren E
;  APPLICANT:  Nicolaisen, Else M
;  APPLICANT:  Jorgensen, Anker S
;  TITLE OF INVENTION: TF Binding Compound
;  FILE REFERENCE: 6455.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,619
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,568
;  PRIOR FILING DATE: 2002-08-19
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
;   LENGTH: 641
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
;   OTHER INFORMATION: Synthetic
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (6)..(7)
;   OTHER INFORMATION: Xaa can be any naturally occurring amino acid
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (14)..(14)
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US-10-617-619-8

  Query Match           100.0%;  Score 3464;  DB 16;  Length 641;
  Best Local Similarity  100.0%;  Pred. No. 8.9e-214;
  Matches  641;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
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Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
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Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
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Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
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Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420
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Qy        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
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RESULT 2
US-10-617-619-11
; Sequence 11, Application US/10617619
; Publication No. US20040110929A1
; GENERAL INFORMATION:
;  APPLICANT: Bjorn, Soren E
;  APPLICANT:  Nicolaisen, Else M
;  APPLICANT:  Jorgensen, Anker S
;  TITLE OF INVENTION: TF Binding Compound
;  FILE REFERENCE: 6455.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,619
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,568
;  PRIOR FILING DATE: 2002-08-19
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 11
;   LENGTH: 679
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
;   OTHER INFORMATION: Synthetic
US-10-617-619-11

  Query Match           100.0%;  Score 3464;  DB 16;  Length 679;
  Best Local Similarity  98.4%;  Pred. No. 9.5e-214;
  Matches  631;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
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Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
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Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
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Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 458

Qy        421 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 518

Qy        481 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 578

Qy        541 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 638

Qy        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||||||||||||||||||||||||||||||||||||||||
Db        639 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 679


RESULT 3
US-10-617-619-6
; Sequence 6, Application US/10617619
; Publication No. US20040110929A1
```

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; GENERAL INFORMATION:
;  APPLICANT: Bjorn, Soren E
;  APPLICANT:  Nicolaisen, Else M
;  APPLICANT:  Jorgensen, Anker S
;  TITLE OF INVENTION: TF Binding Compound
;  FILE REFERENCE: 6455.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,619
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,568
;  PRIOR FILING DATE: 2002-08-19
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 6
;   LENGTH: 701
;   TYPE: PRT
;   ORGANISM: Human
US-10-617-619-6

  Query Match           100.0%;  Score 3464;  DB 16;  Length 701;
  Best Local Similarity   98.4%;  Pred. No. 9.8e-214;
  Matches  631;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db         61 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 120

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 180

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 240

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 300

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 360

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 420

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPKSCDKTHTC 480

Qy        421 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN 540

Qy        481 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREP 600

Qy        541 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 QVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFL 660

Qy        601 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641
              |||||||||||||||||||||||||||||||||||||||||
Db        661 YSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 701


RESULT 4
US-09-782-587B-1
; Sequence 1, Application US/09782587B
; Publication No. US20030096338A1
; GENERAL INFORMATION:
;  APPLICANT: PEDERSEN, ANDERS H.
;  APPLICANT:  ANDERSON, KIM V.
;  APPLICANT:  BORNAES, CLAUS
;  TITLE OF INVENTION: FACTOR VII OR VIIA-LIKE MOLECULES
;  FILE REFERENCE: 31-001100US
;  CURRENT APPLICATION NUMBER: US/09/782,587B
;  CURRENT FILING DATE:  2002-03-26
;  PRIOR APPLICATION NUMBER: PA 2000 00218
;  PRIOR FILING DATE: 2000-02-11
;  PRIOR APPLICATION NUMBER: 60/184,036
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: 60/241,916
;  PRIOR FILING DATE: 2000-10-18
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: MOD_RES
;   LOCATION: (6)..(7)
;   OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
;   NAME/KEY: MOD_RES
;   LOCATION: (14)
;   OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
;   NAME/KEY: MOD_RES
;   LOCATION: (16)
;   OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
;   NAME/KEY: MOD_RES
;   LOCATION: (19)..(20)
;   OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
;   NAME/KEY: MOD_RES
;   LOCATION: (25)..(26)
;   OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
;   NAME/KEY: MOD_RES
;   LOCATION: (29)
;   OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
;   NAME/KEY: MOD_RES
;   LOCATION: (35)
;   OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
US-09-782-587B-1

  Query Match           63.1%;  Score 2187;  DB 10;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
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Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 5
US-09-782-587B-3
; Sequence 3, Application US/09782587B
; Publication No. US20030096338A1
; GENERAL INFORMATION:
;  APPLICANT: PEDERSEN, ANDERS H.
;  APPLICANT:  ANDERSON, KIM V.
;  APPLICANT:  BORNAES, CLAUS
;  TITLE OF INVENTION: FACTOR VII OR VIIA-LIKE MOLECULES
;  FILE REFERENCE: 31-001100US
;  CURRENT APPLICATION NUMBER: US/09/782,587B
;  CURRENT FILING DATE:  2002-03-26
;  PRIOR APPLICATION NUMBER: PA 2000 00218
;  PRIOR FILING DATE: 2000-02-11
;  PRIOR APPLICATION NUMBER: 60/184,036
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: 60/241,916
;  PRIOR FILING DATE: 2000-10-18
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-782-587B-3

  Query Match             63.1%;  Score 2187;  DB 10;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 3.7e-132;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 6
US-10-109-498-1
; Sequence 1, Application US/10109498
; Publication No. US20030044908A1
; GENERAL INFORMATION:
;  APPLICANT: Persson, Egon
;  TITLE OF INVENTION: Coagulation Factor VII Derivatives
;  FILE REFERENCE: 6286.200-US
;  CURRENT APPLICATION NUMBER: US/10/109,498
;  CURRENT FILING DATE:  2002-03-22
;  PRIOR APPLICATION NUMBER: 60/281,261
;  PRIOR FILING DATE: 2001-04-03
;  PRIOR APPLICATION NUMBER: PA 2001 00477
;  PRIOR FILING DATE: 2001-03-22
;  NUMBER OF SEQ ID NOS: 20
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: VARIANT
;   LOCATION: (1)...(406)
;   OTHER INFORMATION: Xaa = Any Amino Acid
US-10-109-498-1

  Query Match             63.1%;  Score 2187;  DB 14;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 7
US-10-255-032-1
; Sequence 1, Application US/10255032
; Publication No. US20030100075A1
; GENERAL INFORMATION:
;  APPLICANT: No. US20030100075A1o No. US20030100075A1disk A/S
;  TITLE OF INVENTION: HUMAN COAGULATION FACTOR VII POLYPEPTIDES
;  FILE REFERENCE: 6357-WO
;  CURRENT APPLICATION NUMBER: US/10/255,032
;  CURRENT FILING DATE:  2002-09-24
;  PRIOR APPLICATION NUMBER: DK PA 2001 01413
;  PRIOR FILING DATE: 2001-09-27
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: human coagulation Factor VII
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (1)..(406)
;   OTHER INFORMATION: Xaa means 4-carboxyglutamic acid (gamma-carboxyglutamate)
US-10-255-032-1
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  Query Match           63.1%;  Score 2187;  DB 14;  Length 406;
  Best Local Similarity  100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 8
US-10-281-727-1
; Sequence 1, Application US/10281727
; Publication No. US20030130191A1
; GENERAL INFORMATION:
;  APPLICANT: Persson, Egon
;  APPLICANT:  Olsen, Ole Hvilsted
;  TITLE OF INVENTION: Human Coagulation Factor VII
;  TITLE OF INVENTION:  Polypeptides
;  FILE REFERENCE: 6410.200-US
;  CURRENT APPLICATION NUMBER: US/10/281,727
;  CURRENT FILING DATE:  2002-10-28
;  PRIOR APPLICATION NUMBER: PA 2001 01627
;  PRIOR FILING DATE: 2001-11-02
;  PRIOR APPLICATION NUMBER: 60/335,383
;  PRIOR FILING DATE: 2001-11-15
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Homo Sapiens
;   FEATURE:
;   OTHER INFORMATION: Xaa means 4-carboxyglutamic acid
;   OTHER INFORMATION: (gamma-carboxyglutamate)
US-10-281-727-1

  Query Match           63.1%;  Score 2187;  DB 14;  Length 406;
  Best Local Similarity  100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 9
US-10-386-898-7
; Sequence 7, Application US/10386898
; Publication No. US20030229018A1
; GENERAL INFORMATION:
;  APPLICANT: No. US20030229018A1o No. US20030229018A1disk Pharmaceuticals, Inc.
;  APPLICANT:  Kjalke, Marianne
;  APPLICANT:  Jakobsen, Palle
;  APPLICANT:  Stennicke, Henning Ralf
;  TITLE OF INVENTION: DIMERIC TF ANTAGONIST
;  FILE REFERENCE: 6445.200-US
;  CURRENT APPLICATION NUMBER: US/10/386,898
;  CURRENT FILING DATE:  2003-03-12
;  PRIOR APPLICATION NUMBER: Danish Application PA 2002 00373
;  PRIOR FILING DATE: 2002-03-12
;  PRIOR APPLICATION NUMBER: US 60/365,935
;  PRIOR FILING DATE: 2002-03-19
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: human coagulation Factor VII
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (1)..(406)
;   OTHER INFORMATION: Xaa means 4-carboxyglutamic acid (gamma-carboxyglutamate)
US-10-386-898-7

  Query Match           63.1%;  Score 2187;  DB 15;  Length 406;
  Best Local Similarity  100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
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Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 10
US-10-383-898-1
; Sequence 1, Application US/10383898
; Publication No. US20040009914A1
; GENERAL INFORMATION:
;  APPLICANT: Emory University
;  TITLE OF INVENTION: Curcuminoid-protein conjugates
;  FILE REFERENCE: E056 1060.1
;  CURRENT APPLICATION NUMBER: US/10/383,898
;  CURRENT FILING DATE:  2003-03-07
;  NUMBER OF SEQ ID NOS: 1
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CHAIN
;   LOCATION: (1)..(406)
US-10-383-898-1

  Query Match             63.1%;  Score 2187;  DB 15;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 3.7e-132;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 11
US-10-617-500-1
; Sequence 1, Application US/10617500
; Publication No. US20040072755A1
; GENERAL INFORMATION:
;  APPLICANT: Novo Nordisk Pharmaceuticals, Inc.
;  APPLICANT:  Stennicke, Henning R
;  APPLICANT:  Bjorn, Soren E
;  APPLICANT:  Petersen, Lars C
;  TITLE OF INVENTION: TF Antagonist
;  FILE REFERENCE: 6510.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,500
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01100
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,567
;  PRIOR FILING DATE: 2002-08-19
;  NUMBER OF SEQ ID NOS: 3
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
;   OTHER INFORMATION: Synthetic
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (1)..(406)
;   OTHER INFORMATION: Xaa=4-carboxyglutamic acid (gamma-carboxyglutamate)
US-10-617-500-1

  Query Match             63.1%;  Score 2187;  DB 15;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 12
US-10-263-205B-2
; Sequence 2, Application US/10263205B
; Publication No. US20040087498A1
; GENERAL INFORMATION:
;  APPLICANT: BERKNER, Kathleen L.
;  APPLICANT:  PETERSEN, Lars
;  APPLICANT:  HART, Charles E.
;  APPLICANT:  HEDNER, Ulla
;  APPLICANT:  BREGENGAARD, Claus
;  TITLE OF INVENTION: MODIFIED FACTOR VII
;  FILE REFERENCE: 13952N-8-5-1
;  CURRENT APPLICATION NUMBER: US/10/263,205B
;  CURRENT FILING DATE:  2002-10-01
;  PRIOR APPLICATION NUMBER: 08/464,029
;  PRIOR FILING DATE: 1995-06-05
;  PRIOR APPLICATION NUMBER: 08/327,690
;  PRIOR FILING DATE: 1994-10-24
;  PRIOR APPLICATION NUMBER: PCT/US94/05779
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;  PRIOR FILING DATE: 1994-05-23
;  PRIOR APPLICATION NUMBER: 08/065,725
;  PRIOR FILING DATE: 1993-05-21
;  PRIOR APPLICATION NUMBER: PCT/US92/01636
;  PRIOR FILING DATE: 1991-02-28
;  PRIOR APPLICATION NUMBER: 07/662,920
;  PRIOR FILING DATE: 1991-02-28
;  NUMBER OF SEQ ID NOS: 5
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-263-205B-2

  Query Match            63.1%;  Score 2187;  DB 15;  Length 406;
  Best Local Similarity  97.5%;  Pred. No. 3.7e-132;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||:|:||::||||::||:|||||:||||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 13
US-10-617-619-1
; Sequence 1, Application US/10617619
; Publication No. US20040110929A1
; GENERAL INFORMATION:
;  APPLICANT: Bjorn, Soren E
;  APPLICANT:  Nicolaisen, Else M
;  APPLICANT:  Jorgensen, Anker S
;  TITLE OF INVENTION: TF Binding Compound
;  FILE REFERENCE: 6455.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,619
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,568
;  PRIOR FILING DATE: 2002-08-19
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
;   OTHER INFORMATION: Synthetic
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (1)..(406)
;   OTHER INFORMATION: Xaa=4-carboxyglutamic acid (gamma-carboxyglutamate)
US-10-617-619-1

  Query Match            63.1%;  Score 2187;  DB 16;  Length 406;
  Best Local Similarity  100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 14
US-10-701-294-1
; Sequence 1, Application US/10701294
; Publication No. US20040143099A1
; GENERAL INFORMATION:
;  APPLICANT: Novo Nordisk Pharmaceuticals, Inc.
;  APPLICANT:  Petersen, Lars C
;  APPLICANT:  Back, Jakob M
;  APPLICANT:  Meyer, Christian
;  TITLE OF INVENTION: Pharmaceutical Composition Comprising a Tissue Factor Antagonist
;  TITLE OF INVENTION:  and a Blood Glucose Regulator
;  FILE REFERENCE: 6608.200-US
;  CURRENT APPLICATION NUMBER: US/10/701,294
;  CURRENT FILING DATE:  2003-11-04
;  PRIOR APPLICATION NUMBER: US 60/434,904
;  PRIOR FILING DATE: 2002-12-20
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01710
;  PRIOR FILING DATE: 2002-11-06
;  NUMBER OF SEQ ID NOS: 1
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: human coagulation Factor VII
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (1)..(406)
;   OTHER INFORMATION: Xaa=4-carboxyglutamic acid (gamma-carboxyglutamate)
US-10-701-294-1

  Query Match            63.1%;  Score 2187;  DB 16;  Length 406;
  Best Local Similarity  100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
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              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 15
US-10-669-537-1
; Sequence 1, Application US/10669537
; Publication No. US20040192602A1
; GENERAL INFORMATION:
;  APPLICANT: Persson, Egon
;  APPLICANT:  Olsen, Ole Hvilsted
;  TITLE OF INVENTION: Human Coagulation Factor VII Polypeptides
;  FILE REFERENCE: 6544.200-US
;  CURRENT APPLICATION NUMBER: US/10/669,537
;  CURRENT FILING DATE:  2003-09-24
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01423
;  PRIOR FILING DATE: 2002-09-25
;  PRIOR APPLICATION NUMBER: US 60/417,927
;  PRIOR FILING DATE: 2002-10-11
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Human
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (1)..(406)
;   OTHER INFORMATION: Xaa=carboxyglutamic acid (gamma-carboxyglutamate)
US-10-669-537-1

  Query Match             63.1%;  Score 2187;  DB 16;  Length 406;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-132;
  Matches  406;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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GenCore version 5.1.6

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Perfect score: 3464
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Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

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Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	2187	63.1	406	4	US-09-782-587B-3	Sequence 3, Appli
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8	2187	63.1	444	2	US-08-660-289-2	Sequence 2, Appli
9	2187	63.1	444	2	US-08-537-807-2	Sequence 2, Appli
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14	2187	63.1	444	5	PCT-US94-05779-2	Sequence 2, Appli
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19	2187	63.1	466	3	US-09-009-217-14	Sequence 14, Appl
20	2187	63.1	466	3	US-09-009-656-14	Sequence 14, Appl
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32	1298.5	37.5	497	4	US-09-499-846-6	Sequence 6, Appli
33	1298.5	37.5	525	4	US-09-499-846-4	Sequence 4, Appli
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35	1283.5	37.1	497	4	US-09-499-846-10	Sequence 10, Appl
36	1283.5	37.1	525	4	US-09-499-846-8	Sequence 8, Appli
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38	1276	36.8	488	4	US-09-499-846-12	Sequence 12, Appl
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ALIGNMENTS

RESULT 1
US-08-295-411-5
; Sequence 5, Application US/08295411
; Patent No. 5679639
; GENERAL INFORMATION:
; APPLICANT: Griffin, John H.
; APPLICANT: Mesters, Rolf M.
; TITLE OF INVENTION: Serine Protease-Derived Polypeptides and
; TITLE OF INVENTION: Anti-Peptide Antibodies, Systems and Therapeutic Methods
; TITLE OF INVENTION: for Inhibiting Coagulation
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Office of Patent Counsel, The Scripps
; ADDRESSEE: Research Institute
; STREET: 10666 No. 5679639th Torrey Pines Road, TPC 8
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/295,411
; FILING DATE: 22-AUG-1994
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/793,989
; FILING DATE: 18-NOV-1991
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitting, Thomas
; REGISTRATION NUMBER: 34,163
; REFERENCE/DOCKET NUMBER: TSRI263.0C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-554-2937
; TELEFAX: 619-554-6312
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 406 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FEATURE:
; NAME/KEY: Region
; LOCATION: 1..152

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;      OTHER INFORMATION:  /note= "Factor VII Light Chain"
;    FEATURE:
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;      LOCATION:  153..406
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US-08-295-411-5

  Query Match             63.1%;  Score 2187;  DB 1;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 1.9e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
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RESULT 2
US-08-955-471-5
; Sequence 5, Application US/08955471
; Patent No. 5968751
;  GENERAL INFORMATION:
;    APPLICANT:  Griffin, John H.
;    APPLICANT:  Mesters, Rolf M.
;    TITLE OF INVENTION:  Serine Protease-Derived Polypeptides and
;    TITLE OF INVENTION:  Anti-Peptide Antibodies, Systems and Therapeutic Methods
;    TITLE OF INVENTION:  for Inhibiting Coagulation
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Office of Patent Counsel, The Scripps
;      ADDRESSEE:  Research Institute
;      STREET:  10666 No. 5968751th Torrey Pines Road, TPC 8
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/955,471
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/295,411
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Fitting, Thomas
;      REGISTRATION NUMBER:  34,163
;      REFERENCE/DOCKET NUMBER:  TSRI263.0C1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  619-554-2937
;      TELEFAX:  619-554-6312
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  406 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
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;      LOCATION:  1..152
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;    FEATURE:
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;      LOCATION:  153..406
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US-08-955-471-5

  Query Match             63.1%;  Score 2187;  DB 2;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 1.9e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

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Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 3
US-09-782-587B-1
; Sequence 1, Application US/09782587B
; Patent No. 6806063
; GENERAL INFORMATION:
;  APPLICANT: PEDERSEN, ANDERS H.
;  APPLICANT:  ANDERSON, KIM V.
;  APPLICANT:  BORNAES, CLAUS
;  TITLE OF INVENTION: FACTOR VII OR VIIA-LIKE MOLECULES
;  FILE REFERENCE: 31-001100US
;  CURRENT APPLICATION NUMBER: US/09/782,587B
;  CURRENT FILING DATE:  2002-03-26
;  PRIOR APPLICATION NUMBER: PA 2000 00218
;  PRIOR FILING DATE: 2000-02-11
;  PRIOR APPLICATION NUMBER: 60/184,036
;  PRIOR FILING DATE: 2000-02-22
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;  PRIOR APPLICATION NUMBER: 60/241,916
;  PRIOR FILING DATE: 2000-10-18
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
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;   OTHER INFORMATION: Gamma carboxyglutamic acid or glutamic acid
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US-09-782-587B-1

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Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
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Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
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Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

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Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
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Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 4
US-09-782-587B-3
; Sequence 3, Application US/09782587B
; Patent No. 6806063
; GENERAL INFORMATION:
;  APPLICANT: PEDERSEN, ANDERS H.
;  APPLICANT:  ANDERSON, KIM V.
;  APPLICANT:  BORNAES, CLAUS
;  TITLE OF INVENTION: FACTOR VII OR VIIA-LIKE MOLECULES
;  FILE REFERENCE: 31-001100US
;  CURRENT APPLICATION NUMBER: US/09/782,587B
;  CURRENT FILING DATE:  2002-03-26
;  PRIOR APPLICATION NUMBER: PA 2000 00218
;  PRIOR FILING DATE: 2000-02-11
;  PRIOR APPLICATION NUMBER: 60/184,036
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: 60/241,916
;  PRIOR FILING DATE: 2000-10-18
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH: 406
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-782-587B-3

  Query Match             63.1%;  Score 2187;  DB 4;  Length 406;
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  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
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Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
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Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 5
PCT-US92-10242-5
; Sequence 5, Application PC/TUS9210242
;  GENERAL INFORMATION:
;    APPLICANT:  Griffin, John H.
;    APPLICANT:  Mesters, Rolf
;    TITLE OF INVENTION:  Serine Protease-Derived Polypeptides and
;    TITLE OF INVENTION:  Anti-Peptide Antibodies, Systems and Therapeutic Methods
;    TITLE OF INVENTION:  for Inhibiting Coagulation
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Office of Patent Counsel, The Scripps
;      ADDRESSEE:  Research Institute
;      STREET:  10666 North Torrey Pines Road, TPC 8
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
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;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US92/10242
;       FILING DATE:  19921118
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/793,989
;       FILING DATE:  18-NOV-1991
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Fitting, Thomas
;       REGISTRATION NUMBER:  34,163
;       REFERENCE/DOCKET NUMBER:  SCR0472P
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  619-554-2937
;       TELEFAX:  619-554-6312
;   INFORMATION FOR SEQ ID NO:  5:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  406 amino acids
;       TYPE:  AMINO ACID
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     FEATURE:
;       NAME/KEY:  Region
;       LOCATION:  1..152
;       OTHER INFORMATION:  /note= "Factor VII Light Chain"
;     FEATURE:
;       NAME/KEY:  Region
;       LOCATION:  153..406
;       OTHER INFORMATION:  /note= "Factor VII Heavy Chain"
PCT-US92-10242-5

  Query Match             63.1%;  Score 2187;  DB 5;  Length 406;
  Best Local Similarity   97.5%;  Pred. No. 1.9e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||||
Db          1 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 60

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
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Db        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406


RESULT 6
US-08-475-845-2
; Sequence 2, Application US/08475845
; Patent No. 5788965
;  GENERAL INFORMATION:
;    APPLICANT:  Berkner, Kathleen L.
;    APPLICANT:  Petersen, Lars C.
;    APPLICANT:  Hart, Charles E.
;    APPLICANT:  Hedner, Ulla
;    APPLICANT:  Bregengaard, Claus
;    TITLE OF INVENTION:  Modified Factor VII
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Townsend and Townsend Khourie and Crew
;      STREET:  One Market Plaza, Steuart Street Tower
;      CITY:  San Francisco
;      STATE:  CA
;      COUNTRY:  U.S.A.
;      ZIP:  94105-1492
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.24
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/475,845
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/327,690
;      FILING DATE:  24-OCT-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/065,725
;      FILING DATE:  21-MAY-1993
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/662,920
;      FILING DATE:  28-FEB-1991
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Parmelee, Steven W.
;      REGISTRATION NUMBER:  31,990
;      REFERENCE/DOCKET NUMBER:  13952-8-4
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  206-467-9600
;      TELEFAX:  415-543-5043
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  444 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-475-845-2

  Query Match             63.1%;  Score 2187;  DB 1;  Length 444;
  Best Local Similarity   97.5%;  Pred. No. 2.1e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
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Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
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Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444


RESULT 7
US-08-327-690-2
; Sequence 2, Application US/08327690
; Patent No. 5817788
;  GENERAL INFORMATION:
;    APPLICANT:  Berkner, Kathleen L.
;    APPLICANT:  Petersen, Lars C.
;    APPLICANT:  Hart, Charles E.
;    APPLICANT:  Hedner, Ulla
;    APPLICANT:  Bregengaard, Claus
;    TITLE OF INVENTION:  Modified Factor VII
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Townsend and Townsend Khourie and Crew
;      STREET:  One Market Plaza, Steuart Street Tower
;      CITY:  San Francisco
;      STATE:  CA
;      COUNTRY:  U.S.A.
;      ZIP:  94105-1492
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.24
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/327,690
;      FILING DATE:  24-OCT-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/065,725
;      FILING DATE:  21-MAY-1993
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/662,920
;      FILING DATE:  28-FEB-1991
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Parmelee, Steven W.
;      REGISTRATION NUMBER:  31,990
;      REFERENCE/DOCKET NUMBER:  13952-8-3
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  206-467-9600
;      TELEFAX:  415-543-5043
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  444 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-327-690-2

  Query Match             63.1%;  Score 2187;  DB 2;  Length 444;
  Best Local Similarity   97.5%;  Pred. No. 2.1e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:||||:||||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444


RESULT 8
US-08-660-289-2
; Sequence 2, Application US/08660289
; Patent No. 5833982
;  GENERAL INFORMATION:
;    APPLICANT:  Berkner, Kathleen L.
;    APPLICANT:  Petersen, Lars C.
;    APPLICANT:  Hart, Charles E.
;    APPLICANT:  Hedner, Ulla
;    APPLICANT:  Bregengaard, Claus
;    TITLE OF INVENTION:  Modified Factor VII
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Townsend and Townsend Khourie and Crew
;      STREET:  One Market Plaza, Steuart Street Tower
;      CITY:  San Francisco
;      STATE:  CA
;      COUNTRY:  U.S.A.
;      ZIP:  94105-1492
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.24
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/660,289
;      FILING DATE:
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/475,845
;      FILING DATE:  07-JUN-1995
;      APPLICATION NUMBER:  08/327,690
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/065,725
;      FILING DATE:  21-MAY-1993
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/662,920
;      FILING DATE:  28-FEB-1991
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Parmelee, Steven W.
;      REGISTRATION NUMBER:  31,990
;      REFERENCE/DOCKET NUMBER:  13952-8-4
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  206-467-9600
;      TELEFAX:  415-543-5043
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  444 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
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US-08-660-289-2

Query Match 63.1%; Score 2187; DB 2; Length 444;
Best Local Similarity 97.5%; Pred. No. 2.1e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444
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RESULT 9
US-08-537-807-2
; Sequence 2, Application US/08537807
; Patent No. 5861374
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: Modified Factor VII
; NUMBER OF SEQUENCES: 4
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/537,807
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/05779
; FILING DATE: 23-MAY-1994
; APPLICATION NUMBER: US 08/065,725
; FILING DATE: 21-MAY-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/662,920
; FILING DATE: 28-FEB-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Parmelee, Steven W.
; REGISTRATION NUMBER: 31,990
; REFERENCE/DOCKET NUMBER: 13952-8-1PC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 206-467-9600
; TELEFAX: 415-543-5043
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 444 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

US-08-537-807-2

Query Match 63.1%; Score 2187; DB 2; Length 444;
Best Local Similarity 97.5%; Pred. No. 2.1e-152;
Matches 396; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444
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RESULT 10
US-08-871-003-2
; Sequence 2, Application US/08871003
; Patent No. 5997864
; GENERAL INFORMATION:
; APPLICANT: Hart, Charles E.
; APPLICANT: Petersen, Lars C.
; APPLICANT: Hedner, Ulla
; APPLICANT: Rasmussen, Mirella E.
; TITLE OF INVENTION: Modified Factor VII
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ZymoGenetics, Inc.
; STREET: 1201 Eastlake Avenue East
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98102
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/871,003
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Sawislak, Deborah A
; REGISTRATION NUMBER: 37,438
; REFERENCE/DOCKET NUMBER: 90-07C7
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 444 amino acids

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;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-871-003-2

  Query Match             63.1%;  Score 2187;  DB 2;  Length 444;
  Best Local Similarity   97.5%;  Pred. No. 2.1e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||:|:||::||||::||:|||||:|||||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444


RESULT 11
US-08-464-233-2
; Sequence 2, Application US/08464233
; Patent No. 6039944
;  GENERAL INFORMATION:
;    APPLICANT:  Berkner, Kathleen L.
;    APPLICANT:  Petersen, Lars C.
;    APPLICANT:  Hart, Charles E.
;    APPLICANT:  Hedner, Ulla
;    APPLICANT:  Bregengaard, Claus
;    TITLE OF INVENTION:  Modified Factor VII
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Townsend and Townsend Khourie and Crew
;      STREET:  One Market Plaza, Steuart Street Tower
;      CITY:  San Francisco
;      STATE:  CA
;      COUNTRY:  U.S.A.
;      ZIP:  94105-1492
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.24
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/464,233
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/327,690
;      FILING DATE:  24-OCT-1994
;      APPLICATION NUMBER:  08/065,725
;      FILING DATE:  21-MAY-1993
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/662,920
;      FILING DATE:  28-FEB-1991
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Parmelee, Steven W.
;      REGISTRATION NUMBER:  31,990
;      REFERENCE/DOCKET NUMBER:  13952-8-3
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  206-467-9600
;      TELEFAX:  415-543-5043
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  444 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-464-233-2

  Query Match             63.1%;  Score 2187;  DB 3;  Length 444;
  Best Local Similarity   97.5%;  Pred. No. 2.1e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||:|:||::||||::||:|||||:|||||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444


RESULT 12
US-09-189-607-2
; Sequence 2, Application US/09189607
; Patent No. 6168789
;  GENERAL INFORMATION:
;    APPLICANT:  Berkner, Kathleen L.
;    APPLICANT:  Petersen, Lars C.
;    APPLICANT:  Hart, Charles E.
;    APPLICANT:  Hedner, Ulla
;    APPLICANT:  Bregengaard, Claus
;    TITLE OF INVENTION:  Modified Factor VII
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Townsend and Townsend Khourie and Crew
;      STREET:  One Market Plaza, Steuart Street Tower
;      CITY:  San Francisco
;      STATE:  CA
;      COUNTRY:  U.S.A.
;      ZIP:  94105-1492
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
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;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.24
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/189,607
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/660,289
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/327,690
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/065,725
;      FILING DATE:  21-MAY-1993
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/662,920
;      FILING DATE:  28-FEB-1991
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Parmelee, Steven W.
;      REGISTRATION NUMBER:  31,990
;      REFERENCE/DOCKET NUMBER:  13952-8-4
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  206-467-9600
;      TELEFAX:  415-543-5043
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  444 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-189-607-2

  Query Match             63.1%;  Score 2187;  DB 3;  Length 444;
  Best Local Similarity   97.5%;  Pred. No. 2.1e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||||:|:||::||||::||:|||||:|||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444


RESULT 13
US-09-378-907-2
; Sequence 2, Application US/09378907
; Patent No. 6183743
;  GENERAL INFORMATION:
;    APPLICANT:  Hart, Charles E.
;    APPLICANT:  Petersen, Lars C.
;    APPLICANT:  Hedner, Ulla
;    APPLICANT:  Rasmussen, Mirella E.
;    TITLE OF INVENTION:  Modified Factor VII
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ZymoGenetics, Inc.
;      STREET:  1201 Eastlake Avenue East
;      CITY:  Seattle
;      STATE:  WA
;      COUNTRY:  USA
;      ZIP:  98102
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.24
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/378,907
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/871,003
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sawislak, Deborah A
;      REGISTRATION NUMBER:  37,438
;      REFERENCE/DOCKET NUMBER:  90-07C7
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  444 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-378-907-2

  Query Match             63.1%;  Score 2187;  DB 3;  Length 444;
  Best Local Similarity   97.5%;  Pred. No. 2.1e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::|||||||:|:||::||||::||:|||||:|||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444


RESULT 14
PCT-US94-05779-2
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; Sequence 2, Application PC/TUS9405779
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Modified Factor VII
;    NUMBER OF SEQUENCES:  4
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US94/05779
;      FILING DATE:  23-MAY-1994
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/065,725
;      FILING DATE:  21-MAY-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/662,920
;      FILING DATE:  28-FEB-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Parmelee, Steven W.
;      REGISTRATION NUMBER:  31,990
;      REFERENCE/DOCKET NUMBER:  13952-8-1PC
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  206-467-9600
;      TELEFAX:  415-543-5043
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  444 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
PCT-US94-05779-2

  Query Match             63.1%;  Score 2187;  DB 5;  Length 444;
  Best Local Similarity   97.5%;  Pred. No. 2.1e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db         39 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 98

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 158

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 218

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 278

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 338

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 398

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
              |||||||||||||||||||||||||||||||||||||||||||||
Db        399 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 444


RESULT 15
US-09-949-016-8839
; Sequence 8839, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
;  APPLICANT: VENTER, J. Craig et al.
;  TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
;  TITLE OF INVENTION:  WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
;  FILE REFERENCE: CL001307
;  CURRENT APPLICATION NUMBER: US/09/949,016
;  CURRENT FILING DATE:  2000-04-14
;  PRIOR APPLICATION NUMBER: 60/241,755
;  PRIOR FILING DATE: 2000-10-20
;  PRIOR APPLICATION NUMBER: 60/237,768
;  PRIOR FILING DATE: 2000-10-03
;  PRIOR APPLICATION NUMBER: 60/231,498
;  PRIOR FILING DATE: 2000-09-08
;  NUMBER OF SEQ ID NOS: 207012
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 8839
;   LENGTH: 461
;   TYPE: PRT
;   ORGANISM: Human
US-09-949-016-8839

  Query Match             63.1%;  Score 2187;  DB 4;  Length 461;
  Best Local Similarity   97.5%;  Pred. No. 2.2e-152;
  Matches  396;  Conservative   10;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ANAFLXXLRPGSLXRXCKXXQCSFXXARXIFKDAXRTKLFWISYSDGDQCASSPCQNGGS 60
              |||||::||||||:|:||::||||::||:|||||:||||||||||||||||||||||||
Db         56 ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGS 115

Qy         61 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        116 CKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSL 175

Qy        121 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        176 LADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG 235

Qy        181 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 240
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Db        236 TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGTTN 295

Qy        241 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 300
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Db        296 HDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALELMVL 355

Qy        301 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 360
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Db        356 NVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRGTWYLTG 415

Qy        361 IVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP 406
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Search completed: February 10, 2005, 05:43:24
Job time : 36.1042 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 10, 2005, 06:40:33 ; Search time 43 Seconds
(without alignments)
402.758 Million cell updates/sec

Title: US-10-617-619A-7
Perfect score: 1263
Sequence: 1 EPKSCDKTHTCPPCPAPELL.....MHEALHNHYTQKSLSLSPGK 232

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 46

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%
Maximum Match 100%
Listing first 500 summaries

Database : Issued_Patents_AA:*
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2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
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6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1263	100.0	232	2	US-08-595-043A-50	Sequence 50, Appl
2	1263	100.0	232	4	US-09-968-362A-26	Sequence 26, Appl
3	1263	100.0	331	3	US-09-178-869-2	Sequence 2, Appli
4	1263	100.0	331	4	US-09-761-413-2	Sequence 2, Appli
5	1263	100.0	360	3	US-09-180-100-11	Sequence 11, Appl
6	1263	100.0	371	1	US-08-236-311-7	Sequence 7, Appli
7	1263	100.0	371	3	US-08-457-918-7	Sequence 7, Appli
8	1263	100.0	371	4	US-10-157-408-7	Sequence 7, Appli
9	1263	100.0	376	3	US-09-180-100-22	Sequence 22, Appl
10	1263	100.0	396	2	US-08-784-512-3	Sequence 3, Appli
11	1263	100.0	396	3	US-09-176-228-3	Sequence 3, Appli
12	1263	100.0	424	5	PCT-US95-03866-12	Sequence 12, Appl
13	1263	100.0	424	5	PCT-US95-03866-14	Sequence 14, Appl
14	1263	100.0	437	5	PCT-US96-10043-11	Sequence 11, Appl
15	1263	100.0	442	4	US-08-472-888A-7	Sequence 7, Appli
16	1263	100.0	442	5	PCT-US96-10043-9	Sequence 9, Appli
17	1263	100.0	446	3	US-08-397-411-7	Sequence 7, Appli
18	1263	100.0	449	1	US-08-458-516-13	Sequence 13, Appl
19	1263	100.0	452	4	US-09-773-877B-16	Sequence 16, Appl
20	1263	100.0	459	1	US-08-157-101A-7	Sequence 7, Appli
21	1263	100.0	462	4	US-09-773-877B-18	Sequence 18, Appl
22	1263	100.0	467	4	US-08-030-175-41	Sequence 41, Appl
23	1263	100.0	467	4	US-08-030-175-42	Sequence 42, Appl
24	1263	100.0	475	4	US-09-740-002-27	Sequence 27, Appl
25	1263	100.0	476	2	US-08-378-939-10	Sequence 10, Appl
26	1263	100.0	476	3	US-08-487-550-4	Sequence 4, Appli
27	1263	100.0	476	3	US-08-487-550-12	Sequence 12, Appl
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32	1263	100.0	478	3	US-08-487-550-8	Sequence 8, Appli
33	1263	100.0	478	4	US-09-526-098-8	Sequence 8, Appli
34	1263	100.0	478	4	US-09-383-916-8	Sequence 8, Appli
35	1263	100.0	497	4	US-09-499-846-6	Sequence 6, Appli
36	1263	100.0	525	4	US-09-499-846-4	Sequence 4, Appli
37	1263	100.0	547	4	US-09-746-359A-54	Sequence 54, Appl
38	1263	100.0	557	4	US-09-773-877B-14	Sequence 14, Appl
39	1263	100.0	567	4	US-09-825-561A-16	Sequence 16, Appl
40	1263	100.0	567	4	US-09-773-877B-12	Sequence 12, Appl
41	1263	100.0	567	4	US-09-773-877B-20	Sequence 20, Appl
42	1263	100.0	571	4	US-09-746-359A-53	Sequence 53, Appl
43	1263	100.0	592	4	US-09-313-942-8	Sequence 8, Appli
44	1263	100.0	622	4	US-09-499-846-2	Sequence 2, Appli
45	1263	100.0	859	4	US-09-313-942-7	Sequence 7, Appli
46	1263	100.0	951	4	US-09-313-942-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1
US-08-595-043A-50
; Sequence 50, Application US/08595043A
; Patent No. 5935824
; GENERAL INFORMATION:
; APPLICANT: SGARLATO, GREGORY D.
; TITLE OF INVENTION: PROTEIN EXPRESSION SYSTEM
; NUMBER OF SEQUENCES: 90
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/595,043A
; FILING DATE: 31-JAN-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: SGAR-00371
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 232 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-595-043A-50

Query Match 100.0%; Score 1263; DB 2; Length 232;
Best Local Similarity 100.0%; Pred. No. 5.4e-120;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232


RESULT 2
US-09-968-362A-26
; Sequence 26, Application US/09968362A
; Patent No. 6797493
; GENERAL INFORMATION:
;  APPLICANT: Sun, Lee-Hwei K
;  APPLICANT:  Sun, Bill
;  APPLICANT:  Sun, Cecily R
;  TITLE OF INVENTION: Fc fusion proteins of human granulocyte colony-stimulaing factor
;  TITLE OF INVENTION:  increased biological activities
;  FILE REFERENCE: 03SUN2001
;  CURRENT APPLICATION NUMBER: US/09/968,362A
;  CURRENT FILING DATE:  2001-10-01
;  NUMBER OF SEQ ID NOS: 28
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 26
;   LENGTH: 232
;   TYPE: PRT
;   ORGANISM: Human IgG1 Fc with native hinge, CH2 and CH3 domains
US-09-968-362A-26

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  Best Local Similarity  100.0%;  Pred. No. 5.4e-120;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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RESULT 3
US-09-178-869-2
; Sequence 2, Application US/09178869B
; Patent No. 6197294
; GENERAL INFORMATION:
;  APPLICANT: Tao, Weng
;  APPLICANT: Wong, Shou
;  APPLICANT: Hickey, William F
;  APPLICANT: Hammang, Joseph P.
;  APPLICANT: Baetge, E. Edward
;  TITLE OF INVENTION: CELL SURFACE-INDUCED MACROPHAGE ACTIVATION
;  FILE REFERENCE: 17810-043
;  CURRENT APPLICATION NUMBER: US/09/178,869B
;  CURRENT FILING DATE: 1998-10-26
;  NUMBER OF SEQ ID NOS: 14
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
;   LENGTH: 331
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-178-869-2

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  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db        100 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 159

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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RESULT 4
US-09-761-413-2
; Sequence 2, Application US/09761413
; Patent No. 6506891
; GENERAL INFORMATION:
;  APPLICANT: Tao, Weng
;  APPLICANT:  Wong, Shou
;  APPLICANT:  Hickey, William F
;  APPLICANT:  Hammang, Joseph P.
;  APPLICANT:  Baetge, E. Edward
;  TITLE OF INVENTION: CELL SURFACE-INDUCED MACROPHAGE ACTIVATION
;  FILE REFERENCE: 17810-043
;  CURRENT APPLICATION NUMBER: US/09/761,413
;  CURRENT FILING DATE:  2001-01-16
;  PRIOR APPLICATION NUMBER: US/09/178,869
;  PRIOR FILING DATE: 1998-10-26
;  NUMBER OF SEQ ID NOS: 14
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
;   LENGTH: 331
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-761-413-2

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Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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RESULT 5
US-09-180-100-11
; Sequence 11, Application US/09180100
; Patent No. 6306395
; GENERAL INFORMATION:
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;  APPLICANT: NAKAMURA, No. 6306395io
;  APPLICANT: NAGATA, Shigekazu
;  TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE
;  FILE REFERENCE: 1110-207P
;  CURRENT APPLICATION NUMBER: US/09/180,100
;  CURRENT FILING DATE: 1998-11-02
;  EARLIER APPLICATION NUMBER: PCT/JP97/01502
;  EARLIER FILING DATE: 1997-05-01
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
;   LENGTH: 360
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-180-100-11

  Query Match             100.0%;  Score 1263;  DB 3;  Length 360;
  Best Local Similarity   100.0%;  Pred. No. 1e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db        129 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 188

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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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Db        309 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 360


RESULT 6
US-08-236-311-7
; Sequence 7, Application US/08236311
; Patent No. 5565335
;  GENERAL INFORMATION:
;    APPLICANT:  Capon, Daniel J.
;    APPLICANT:  Gregory, Timothy J.
;    TITLE OF INVENTION:  Adheson Variants
;    NUMBER OF SEQUENCES:  25
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genentech, Inc.
;      STREET:  460 Point San Bruno Blvd
;      CITY:  South San Francisco
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  94080
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  5.25 inch, 360 Kb floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  patin (Genentech)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/236,311
;      FILING DATE:  02-MAY-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/936190
;      FILING DATE:  26-AUG-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/842777
;      FILING DATE:  18-FEB-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/250785
;      FILING DATE:  28-SEP-1988
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/104329
;      FILING DATE:  02-OCT-1987
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Hasak, Janet E.
;      REGISTRATION NUMBER:  28,616
;      REFERENCE/DOCKET NUMBER:  444P1C2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415/225-1896
;      TELEFAX:  415/952-9881
;      TELEX:  910/371-7168
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  371 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
US-08-236-311-7

  Query Match             100.0%;  Score 1263;  DB 1;  Length 371;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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RESULT 7
US-08-457-918-7
; Sequence 7, Application US/08457918
; Patent No. 6117655
;  GENERAL INFORMATION:
;    APPLICANT:  Capon, Daniel J.
;    APPLICANT:  Gregory, Timothy J.
;    TITLE OF INVENTION:  Adheson Variants
;    NUMBER OF SEQUENCES:  25
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genentech, Inc.
;      STREET:  460 Point San Bruno Blvd
;      CITY:  South San Francisco
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  94080
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  5.25 inch, 360 Kb floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  patin (Genentech)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/457,918
;      FILING DATE:  1-JUN-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/236311
;      FILING DATE:  02-MAY-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/936190
;      FILING DATE:  26-AUG-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/842777
;      FILING DATE:  18-FEB-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/250785
```

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;      FILING DATE:  28-SEP-1988
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/104329
;      FILING DATE:  02-OCT-1987
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Kubinec, Jeffrey S.
;      REGISTRATION NUMBER:  36,575
;      REFERENCE/DOCKET NUMBER:  P0444P1C3
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415/225-8228
;      TELEFAX:  415/952-9881
;      TELEX:  910/371-7168
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  371 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
US-08-457-918-7

  Query Match           100.0%;  Score 1263;  DB 3;  Length 371;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 199

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 319

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        320 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 371


RESULT 8
US-10-157-408-7
; Sequence 7, Application US/10157408
; Patent No. 6710169
;   GENERAL INFORMATION:
;       APPLICANT: Capon, Daniel J.
;                  Gregory, Timothy J.
;       TITLE OF INVENTION: Adheson Variants
;       NUMBER OF SEQUENCES: 25
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Genentech, Inc.
;            STREET: 460 Point San Bruno Blvd
;            CITY: South San Francisco
;            STATE: California
;            COUNTRY: USA
;            ZIP: 94080
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: patin (Genentech)
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/10/157,408
;            FILING DATE: 28-May-2002
;            CLASSIFICATION: 435
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/08/457,918
;            FILING DATE: 1-JUN-1995
;            APPLICATION NUMBER: 08/236311
;            FILING DATE: 02-MAY-1994
;            APPLICATION NUMBER: 07/936190
;            FILING DATE: 26-AUG-1992
;            APPLICATION NUMBER: 07/842777
;            FILING DATE: 18-FEB-1992
;            APPLICATION NUMBER: 07/250785
;            FILING DATE: 28-SEP-1988
;            APPLICATION NUMBER: 07/104329
;            FILING DATE: 02-OCT-1987
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Kubinec, Jeffrey S.
;            REGISTRATION NUMBER: 36,575
;            REFERENCE/DOCKET NUMBER: P0444P1C3
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415/225-8228
;            TELEFAX: 415/952-9881
;            TELEX: 910/371-7168
;   INFORMATION FOR SEQ ID NO: 7:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 371 amino acids
;            TYPE: amino acid
;            TOPOLOGY: linear
;       SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-157-408-7

  Query Match           100.0%;  Score 1263;  DB 4;  Length 371;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 199

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 319

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        320 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 371


RESULT 9
US-09-180-100-22
; Sequence 22, Application US/09180100
; Patent No. 6306395
; GENERAL INFORMATION:
;  APPLICANT: NAKAMURA, No. 6306395io
;  APPLICANT: NAGATA, Shigekazu
;  TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE
;  FILE REFERENCE: 1110-207P
;  CURRENT APPLICATION NUMBER: US/09/180,100
;  CURRENT FILING DATE: 1998-11-02
;  EARLIER APPLICATION NUMBER: PCT/JP97/01502
;  EARLIER FILING DATE: 1997-05-01
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
;   LENGTH: 376
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-180-100-22

  Query Match           100.0%;  Score 1263;  DB 3;  Length 376;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        145 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 204

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        205 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 264

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        265 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 324

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        325 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 376


RESULT 10
US-08-784-512-3
; Sequence 3, Application US/08784512
; Patent No. 5872209
;  GENERAL INFORMATION:
;    APPLICANT:  BARTNIK, Eckart
;    APPLICANT:  EIDENMUELLER, Bernd
;    APPLICANT:  BUETTNER, Frank
;    APPLICANT:  CATERSON, Bruce
;    APPLICANT:  HUGHES, Clare
;    TITLE OF INVENTION:  An artificial recombinant substrate (rAGG 1)
;    TITLE OF INVENTION:  and native aggrecan to study the proteolytic activity of
;    TITLE OF INVENTION:  "Aggrecanase" in cell culture systems
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Foley & Lardner
;      STREET:  Suite 500, 3000 K Street, N.W.
;      CITY:  Washington, D.C.
;      COUNTRY:  USA
;      ZIP:  20007-5109
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/784,512
;      FILING DATE:  17-JAN-1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 96100682.2
;      FILING DATE:  18-JAN-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  GRANADOS, Patricia D.
;      REGISTRATION NUMBER:  33,683
;      REFERENCE/DOCKET NUMBER:  18748/311
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202)672-5300
;      TELEFAX:  (202)672-5399
;      TELEX:  904136
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  396 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    FEATURE:
;      NAME/KEY:  Protein
;      LOCATION:  1..396
US-08-784-512-3

  Query Match           100.0%;  Score 1263;  DB 2;  Length 396;
  Best Local Similarity  100.0%;  Pred. No. 1.2e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        165 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 224

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        225 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        345 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 396


RESULT 11
US-09-176-228-3
; Sequence 3, Application US/09176228
; Patent No. 6180334
;  GENERAL INFORMATION:
;    APPLICANT:  BARTNIK, Eckart
;    APPLICANT:  EIDENMUELLER, Bernd
;    APPLICANT:  BUETTNER, Frank
;    APPLICANT:  CATERSON, Bruce
;    APPLICANT:  HUGHES, Clare
;    TITLE OF INVENTION:  An artificial recombinant substrate (rAGG 1)
;    TITLE OF INVENTION:  and native aggrecan to study the proteolytic activity of
;    TITLE OF INVENTION:  "Aggrecanase" in cell culture systems
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Foley & Lardner
;      STREET:  Suite 500, 3000 K Street, N.W.
;      CITY:  Washington, D.C.
;      COUNTRY:  USA
;      ZIP:  20007-5109
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/176,228
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/784,512
;      FILING DATE:  17-JAN-1997
;      APPLICATION NUMBER:  EP 96100682.2
;      FILING DATE:  18-JAN-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  GRANADOS, Patricia D.
;      REGISTRATION NUMBER:  33,683
;      REFERENCE/DOCKET NUMBER:  18748/311
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202)672-5300
;      TELEFAX:  (202)672-5399
;      TELEX:  904136
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  396 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    FEATURE:
;      NAME/KEY:  Protein
;      LOCATION:  1..396
US-09-176-228-3

  Query Match           100.0%;  Score 1263;  DB 3;  Length 396;
  Best Local Similarity  100.0%;  Pred. No. 1.2e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        165 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 224

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        225 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        345 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 396


RESULT 12
PCT-US95-03866-12
; Sequence 12, Application PC/TUS9503866
;  GENERAL INFORMATION:
;    APPLICANT:  CytoMed, Inc. (all states except US)
;    APPLICANT:  Nocka, Karl (US only)
;    APPLICANT:  Lobell, Robert B (US only)
;    TITLE OF INVENTION:  STABILIZED DIMER OF KIT LIGAND AND
;    TITLE OF INVENTION:  FLT-3/FLK-2 LIGAND
;    NUMBER OF SEQUENCES:  36
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Neave
;      STREET:  1251 Avenue of the Americas
;      CITY:  New York
;      STATE:  New York
;      COUNTRY:  United States of America
;      ZIP:  10020
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/03866
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/220,379
;      FILING DATE:  28-MAR-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haley Jr, James F
;      REGISTRATION NUMBER:  27,794
;      REFERENCE/DOCKET NUMBER:  CytoMed/2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  212-596-9000
;      TELEFAX:  212-596-9090
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  424 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
PCT-US95-03866-12

  Query Match             100.0%;  Score 1263;  DB 5;  Length 424;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        193 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 252

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        253 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 312

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        313 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 372

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        373 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 424


RESULT 13
PCT-US95-03866-14
; Sequence 14, Application PC/TUS9503866
;  GENERAL INFORMATION:
;    APPLICANT:  CytoMed, Inc. (all states except US)
;    APPLICANT:  Nocka, Karl (US only)
;    APPLICANT:  Lobell, Robert B (US only)
;    TITLE OF INVENTION:  STABILIZED DIMER OF KIT LIGAND AND
;    TITLE OF INVENTION:  FLT-3/FLK-2 LIGAND
;    NUMBER OF SEQUENCES:  36
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Neave
;      STREET:  1251 Avenue of the Americas
;      CITY:  New York
;      STATE:  New York
;      COUNTRY:  United States of America
;      ZIP:  10020
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/03866
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/220,379
;      FILING DATE:  28-MAR-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haley Jr, James F
;      REGISTRATION NUMBER:  27,794
;      REFERENCE/DOCKET NUMBER:  CytoMed/2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  212-596-9000
;      TELEFAX:  212-596-9090
;  INFORMATION FOR SEQ ID NO:  14:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  424 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
PCT-US95-03866-14

  Query Match             100.0%;  Score 1263;  DB 5;  Length 424;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        193 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 252

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        253 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 312

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        313 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 372

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        373 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 424


RESULT 14
PCT-US96-10043-11
; Sequence 11, Application PC/TUS9610043
;  GENERAL INFORMATION:
;    APPLICANT:  The General Hospital Corporation
```

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;    TITLE OF INVENTION:  P-SELECTIN LIGANDS AND RELATED MOLECULES
;    TITLE OF INVENTION:  AND METHODS
;    NUMBER OF SEQUENCES:  14
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02210-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US96/10043
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 60/000,213
;      FILING DATE:  14-JUN-1995
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Lech, Karen F.
;      REGISTRATION NUMBER:
;      REFERENCE/DOCKET NUMBER:  00786/284001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/542-5070
;      TELEFAX:  617/542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  11:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  437 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  not relevant
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
PCT-US96-10043-11

  Query Match             100.0%;  Score 1263;  DB 5;  Length 437;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 265

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 325

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 385

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 437


RESULT 15
US-08-472-888A-7
; Sequence 7, Application US/08472888A
; Patent No. 6613746
;  GENERAL INFORMATION:
;    APPLICANT:  Seed, Brian
;    APPLICANT:  Walz, Gerd
;    TITLE OF INVENTION:  AGP-ANTIBODY FUSION PROTEINS
;    TITLE OF INVENTION:  AND RELATED MOLECULES AND METHODS
;    NUMBER OF SEQUENCES:  9
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  176 Federal Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/472,888A
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/618,314
;      FILING DATE:  23-NOV-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Elbing, Karen L
;      REGISTRATION NUMBER:  35,238
;      REFERENCE/DOCKET NUMBER:  00786/258001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617-428-0200
;      TELEFAX:  617-428-7045
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  442 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-472-888A-7

  Query Match             100.0%;  Score 1263;  DB 4;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 16
PCT-US96-10043-9
; Sequence 9, Application PC/TUS9610043
;  GENERAL INFORMATION:
;    APPLICANT:  The General Hospital Corporation
;    TITLE OF INVENTION:  P-SELECTIN LIGANDS AND RELATED MOLECULES
;    TITLE OF INVENTION:  AND METHODS
;    NUMBER OF SEQUENCES:  14
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02210-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
```

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;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.30
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US96/10043
;       FILING DATE:
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 60/000,213
;       FILING DATE:  14-JUN-1995
;       CLASSIFICATION:
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Lech, Karen F.
;       REGISTRATION NUMBER:
;       REFERENCE/DOCKET NUMBER:  00786/284001
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  617/542-5070
;       TELEFAX:  617/542-8906
;       TELEX:  200154
;   INFORMATION FOR SEQ ID NO:  9:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  442 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  not relevant
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
PCT-US96-10043-9

  Query Match             100.0%;  Score 1263;  DB 5;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 17
US-08-397-411-7
; Sequence 7, Application US/08397411
; Patent No. 6129914
;  GENERAL INFORMATION:
;    APPLICANT:  Weiner, George
;    APPLICANT:  Gingrich, Roger
;    APPLICANT:  Link, Brian
;    APPLICANT:  Tso, J. Yun
;    TITLE OF INVENTION:  Bispecific Antibody Effective to Treat
;    TITLE OF INVENTION:  B-Cell Lymphoma and Cell Line
;    NUMBER OF SEQUENCES:  14
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Townsend and Townsend and Crew
;      STREET:  One Market Plaza, Steuart Tower, Suite 2000
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  94105
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/397,411
;      FILING DATE:  01-MAR-1995
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/859,583
;      FILING DATE:  27-MAR-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Smith, William M.
;      REGISTRATION NUMBER:  30,223
;      REFERENCE/DOCKET NUMBER:  011823-004901
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-326-2400
;      TELEFAX:  415-326-2422
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  446 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-397-411-7

  Query Match             100.0%;  Score 1263;  DB 3;  Length 446;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 18
US-08-458-516-13
; Sequence 13, Application US/08458516
; Patent No. 5777085
;  GENERAL INFORMATION:
;    APPLICANT:  Co, Man Sung
;    APPLICANT:  Tso, J. Yun
;    TITLE OF INVENTION:  Humanized Antibodies Reactive with
;    TITLE OF INVENTION:  GPIIB/IIIA
;    NUMBER OF SEQUENCES:  23
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  William M. Smith
;      STREET:  One Market Plaza, Steuart Tower, Suite 2000
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  94105
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/458,516
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/059,159
;      FILING DATE:  03-MAY-1993
;    ATTORNEY/AGENT INFORMATION:
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;      NAME:  Smith, William M.
;      REGISTRATION NUMBER:  30,223
;      REFERENCE/DOCKET NUMBER:  11823-37-3
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-326-2400
;      TELEFAX:  415-326-2422
;  INFORMATION FOR SEQ ID NO:  13:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  449 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-458-516-13

  Query Match           100.0%;  Score 1263;  DB 1;  Length 449;
  Best Local Similarity  100.0%;  Pred. No. 1.4e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 397

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        398 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 449


RESULT 19
US-09-773-877B-16
; Sequence 16, Application US/09773877B
; Patent No. 6833349
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877B
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 16
;   LENGTH: 452
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Flt1(2-3 deltaB)-Fc
US-09-773-877B-16

  Query Match           100.0%;  Score 1263;  DB 4;  Length 452;
  Best Local Similarity  100.0%;  Pred. No. 1.4e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 280

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 340

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 400

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 452


RESULT 20
US-08-157-101A-7
; Sequence 7, Application US/08157101A
; Patent No. 5808032
;  GENERAL INFORMATION:
;    APPLICANT:  KURIHARA, TATSUYA
;    APPLICANT:  MATSUKURA, SHIGEKAZU
;    APPLICANT:  TSURUOKA, NOBUO
;    APPLICANT:  ARIMA, KENJI
;    APPLICANT:  NISHIHARA, TATSURO
;    TITLE OF INVENTION:  ANTI-HBs ANTIBODY GENES AND EXPRESSION
;    TITLE OF INVENTION:  PLASMIDS THEREFOR
;    NUMBER OF SEQUENCES:  9
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  PILLSBURY, MADISON & SUTRO
;      STREET:  1100 NEW YORK AVENUE, N.W.
;      CITY:  WASHINGTON
;      STATE:  D.C.
;      COUNTRY:  USA
;      ZIP:  20005
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/157,101A
;      FILING DATE:  05-APR-1994
;      CLASSIFICATION:  530
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  TITUS, MARLANA K
;      REGISTRATION NUMBER:  35843
;      REFERENCE/DOCKET NUMBER:  9437/204199
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-861-3711
;      TELEFAX:  202-822-0944
;      TELEX:  6714627 CUCH
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  459 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-157-101A-7

  Query Match           100.0%;  Score 1263;  DB 1;  Length 459;
  Best Local Similarity  100.0%;  Pred. No. 1.4e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        228 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 287

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        288 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 347

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        348 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 407

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        408 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 459


RESULT 21
US-09-773-877B-18
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; Sequence 18, Application US/09773877B
; Patent No. 6833349
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877B
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 18
;   LENGTH: 462
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Flt1(2-3)-Fc (Mut3)
US-09-773-877B-18

  Query Match            100.0%;  Score 1263;  DB 4;  Length 462;
  Best Local Similarity  100.0%;  Pred. No. 1.4e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 290

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 350

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 410

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 462


RESULT 22
US-08-030-175-41
; Sequence 41, Application US/08030175
; Patent No. 6767996
;  GENERAL INFORMATION:
;    APPLICANT:  Gorman, Scott D.
;    APPLICANT:  Clark, Michael R.
;    APPLICANT:  Cobbold, Stephen P.
;    APPLICANT:  Waldmann, Herman
;    TITLE OF INVENTION:  ALTERED ANTIBODIES AND THEIR PREPARATION
;    NUMBER OF SEQUENCES:  43
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Rothwell, Figg, Ernst & Kurz, P. C.
;      STREET:  555 13TH ST., NW  Suite 701 East
;      CITY:  Washington
;      STATE:  D. C.
;      COUNTRY:  U.S.
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk, 5.25 inch, 360 Kb storage
;      COMPUTER:  IBM AT compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS V 3.2
;      SOFTWARE:  WordPerfect 5.0 (Dos Text)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/030,175
;      FILING DATE:  17-MAY-1993
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB91/01578
;      FILING DATE:  13-SEP-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ernst, Barbara G.
;      REGISTRATION NUMBER:  30,377
;      REFERENCE/DOCKET NUMBER:  1768-113
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202)783-6040
;      TELEFAX:  (202)783-6031
;  INFORMATION FOR SEQ ID NO:  41:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  467 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-030-175-41

  Query Match            100.0%;  Score 1263;  DB 4;  Length 467;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 23
US-08-030-175-42
; Sequence 42, Application US/08030175
; Patent No. 6767996
;  GENERAL INFORMATION:
;    APPLICANT:  Gorman, Scott D.
;    APPLICANT:  Clark, Michael R.
;    APPLICANT:  Cobbold, Stephen P.
;    APPLICANT:  Waldmann, Herman
;    TITLE OF INVENTION:  ALTERED ANTIBODIES AND THEIR PREPARATION
;    NUMBER OF SEQUENCES:  43
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Rothwell, Figg, Ernst & Kurz, P. C.
;      STREET:  555 13TH ST., NW  Suite 701 East
;      CITY:  Washington
;      STATE:  D. C.
;      COUNTRY:  U.S.
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk, 5.25 inch, 360 Kb storage
;      COMPUTER:  IBM AT compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS V 3.2
;      SOFTWARE:  WordPerfect 5.0 (Dos Text)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/030,175
;      FILING DATE:  17-MAY-1993
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB91/01578
;      FILING DATE:  13-SEP-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ernst, Barbara G.
;      REGISTRATION NUMBER:  30,377
;      REFERENCE/DOCKET NUMBER:  1768-113
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202)783-6040
;      TELEFAX:  (202)783-6031
;  INFORMATION FOR SEQ ID NO:  42:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  467 amino acids
;      TYPE:  amino acid
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;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-030-175-42

  Query Match             100.0%;  Score 1263;  DB 4;  Length 467;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 24
US-09-740-002-27
; Sequence 27, Application US/09740002
; Patent No. 6537809
; GENERAL INFORMATION:
;  APPLICANT: BRAMS, PETER
;  APPLICANT:  MORROW, PHILLIP
;  TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
;  TITLE OF INVENTION:  SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
;  TITLE OF INVENTION:  MANUFACTURE AND THERAPEUTIC USE THEREOF
;  FILE REFERENCE: 037003-0275759
;  CURRENT APPLICATION NUMBER: US/09/740,002
;  CURRENT FILING DATE:  2000-12-20
;  PRIOR APPLICATION NUMBER: 09/335,697
;  PRIOR FILING DATE: 1999-06-18
;  PRIOR APPLICATION NUMBER: 08/488,376
;  PRIOR FILING DATE: 1995-06-07
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
;   LENGTH: 475
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-740-002-27

  Query Match             100.0%;  Score 1263;  DB 4;  Length 475;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 25
US-08-378-939-10
; Sequence 10, Application US/08378939
; Patent No. 5876961
;  GENERAL INFORMATION:
;    APPLICANT:  CROWE, JAMES SCOTT
;    APPLICANT:  LEWIS, ALAN PETER
;    TITLE OF INVENTION:  PRODUCTION OF ANTIBODIES
;    NUMBER OF SEQUENCES:  46
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ROTHWELL, FIGG, ERNST & KURZ
;      STREET:  555 THIRTEENTH ST. N.W.
;      CITY:  WASHINGTON
;      STATE:  D. C.
;      COUNTRY:  U.S.
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/378,939
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/952640
;      FILING DATE:  01-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ERNST, BARBARA G
;      REGISTRATION NUMBER:  30,377
;      REFERENCE/DOCKET NUMBER:  1808-118
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 783-6040
;      TELEFAX:  (202) 783-6031
;  INFORMATION FOR SEQ ID NO:  10:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-378-939-10

  Query Match             100.0%;  Score 1263;  DB 2;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 26
US-08-487-550-4
; Sequence 4, Application US/08487550
; Patent No. 6113898
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
```

```
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/487,550
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-487-550-4

  Query Match             100.0%;  Score 1263;  DB 3;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 27
US-08-487-550-12
; Sequence 12, Application US/08487550
; Patent No. 6113898
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/487,550
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-487-550-12

  Query Match             100.0%;  Score 1263;  DB 3;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 28
US-09-526-098-4
; Sequence 4, Application US/09526098
; Patent No. 6492134
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/526,098
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
```

```
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-526-098-4

  Query Match             100.0%;  Score 1263;  DB 4;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 29
US-09-526-098-12
; Sequence 12, Application US/09526098
; Patent No. 6492134
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/526,098
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-526-098-12

  Query Match             100.0%;  Score 1263;  DB 4;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 30
US-09-383-916-4
; Sequence 4, Application US/09383916
; Patent No. 6709654
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/383,916
;      FILING DATE:  26-AUG-1999
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
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;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-383-916-4

  Query Match             100.0%;  Score 1263;  DB 4;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 31
US-09-383-916-12
; Sequence 12, Application US/09383916
; Patent No. 6709654
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/383,916
;      FILING DATE:  26-AUG-1999
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-383-916-12

  Query Match             100.0%;  Score 1263;  DB 4;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 32
US-08-487-550-8
; Sequence 8, Application US/08487550
; Patent No. 6113898
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/487,550
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 478 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-487-550-8

  Query Match             100.0%;  Score 1263;  DB 3;  Length 478;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 33
US-09-526-098-8
; Sequence 8, Application US/09526098
; Patent No. 6492134
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/526,098
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 478 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-526-098-8

  Query Match           100.0%;  Score 1263;  DB 4;  Length 478;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 34
US-09-383-916-8
; Sequence 8, Application US/09383916
; Patent No. 6709654
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/383,916
;      FILING DATE:  26-AUG-1999
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 478 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-383-916-8

  Query Match           100.0%;  Score 1263;  DB 4;  Length 478;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 35
US-09-499-846-6
; Sequence 6, Application US/09499846
; Patent No. 6656728
```

```
; GENERAL INFORMATION:
;  APPLICANT: Kavanaugh et al.
;  TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
;  TITLE OF INVENTION:  RECEPTOR-IMMUNOGLOBULIN FUSION
;  FILE REFERENCE: 035784/195012 (5784-
;  CURRENT APPLICATION NUMBER: US/09/499,846
;  CURRENT FILING DATE:  2000-02-07
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 6
;   LENGTH: 497
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-499-846-6

  Query Match            100.0%;  Score 1263;  DB 4;  Length 497;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 325

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 385

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 445

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        446 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 497


RESULT 36
US-09-499-846-4
; Sequence 4, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
;  APPLICANT: Kavanaugh et al.
;  TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
;  TITLE OF INVENTION:  RECEPTOR-IMMUNOGLOBULIN FUSION
;  FILE REFERENCE: 035784/195012 (5784-
;  CURRENT APPLICATION NUMBER: US/09/499,846
;  CURRENT FILING DATE:  2000-02-07
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 525
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-499-846-4

  Query Match            100.0%;  Score 1263;  DB 4;  Length 525;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 353

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 413

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 473

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        474 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 525


RESULT 37
US-09-746-359A-54
; Sequence 54, Application US/09746359A
; Patent No. 6610286
; GENERAL INFORMATION:
;  APPLICANT: Thompson, Penny
;  APPLICANT:  Foster, Donald C.
;  APPLICANT:  Xu, Wenfeng
;  APPLICANT:  Madden, Karen L.
;  APPLICANT:  Kelly, James D.
;  APPLICANT:  Sprecher, Cindy A.
;  APPLICANT:  Blumberg, Hal
;  APPLICANT:  Eagan, Maribeth A.
;  APPLICANT:  Jaspers, Stephen R.
;  APPLICANT:  Chandrasekher, Yasmin A.
;  APPLICANT:  No. 6610286ak, Julia E.
;  TITLE OF INVENTION: Method for Treating Inflammation
;  FILE REFERENCE: 99-108
;  CURRENT APPLICATION NUMBER: US/09/746,359A
;  CURRENT FILING DATE:  2001-05-21
;  PRIOR APPLICATION NUMBER: 60/171,969
;  PRIOR FILING DATE: 1999-12-23
;  PRIOR APPLICATION NUMBER: 60/213,341
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 72
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 54
;   LENGTH: 547
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-746-359A-54

  Query Match            100.0%;  Score 1263;  DB 4;  Length 547;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        316 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 375

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        376 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 435

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        436 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 495

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        496 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 547


RESULT 38
US-09-773-877B-14
; Sequence 14, Application US/09773877B
; Patent No. 6833349
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877B
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 14
;   LENGTH: 557
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
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;   OTHER INFORMATION: Flt1(1-3 deltaB)-Fc (Mut1)
US-09-773-877B-14

  Query Match             100.0%;  Score 1263;  DB 4;  Length 557;
  Best Local Similarity   100.0%;  Pred. No. 1.9e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 385

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 445

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        446 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 505

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        506 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 557


RESULT 39
US-09-825-561A-16
; Sequence 16, Application US/09825561A
; Patent No. 6777539
; GENERAL INFORMATION:
;  APPLICANT: Sprecher, Cindy A.
;  APPLICANT:  No. 6777539ak, Julia E.
;  APPLICANT:  West, James W.
;  APPLICANT:  Presnell, Scott R.
;  APPLICANT:  Holly, Richard D.
;  APPLICANT:  Nelson, Andrew J.
;  TITLE OF INVENTION: SOLUBLE ZALPHA11 CYTOKINE RECEPTORS
;  FILE REFERENCE: 00-22
;  CURRENT APPLICATION NUMBER: US/09/825,561A
;  CURRENT FILING DATE:  2000-04-05
;  PRIOR APPLICATION NUMBER: US 60/194,731
;  PRIOR FILING DATE: 2000-04-05
;  PRIOR APPLICATION NUMBER: US 60/222,121
;  PRIOR FILING DATE: 2000-07-28
;  NUMBER OF SEQ ID NOS: 86
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 16
;   LENGTH: 567
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: soluble zalpha11R/IgGgamma1 polypeptide
US-09-825-561A-16

  Query Match             100.0%;  Score 1263;  DB 4;  Length 567;
  Best Local Similarity   100.0%;  Pred. No. 1.9e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 455

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 515

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567


RESULT 40
US-09-773-877B-12
; Sequence 12, Application US/09773877B
; Patent No. 6833349
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877B
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 12
;   LENGTH: 567
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Flt(1-3)-Fc
US-09-773-877B-12

  Query Match             100.0%;  Score 1263;  DB 4;  Length 567;
  Best Local Similarity   100.0%;  Pred. No. 1.9e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 455

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 515

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567


RESULT 41
US-09-773-877B-20
; Sequence 20, Application US/09773877B
; Patent No. 6833349
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877B
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
;   LENGTH: 567
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Flt1(1-3 R->N)-Fc (Mut4)
US-09-773-877B-20

  Query Match             100.0%;  Score 1263;  DB 4;  Length 567;
  Best Local Similarity   100.0%;  Pred. No. 1.9e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 455
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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 515

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567


RESULT 42
US-09-746-359A-53
; Sequence 53, Application US/09746359A
; Patent No. 6610286
; GENERAL INFORMATION:
;  APPLICANT: Thompson, Penny
;  APPLICANT:  Foster, Donald C.
;  APPLICANT:  Xu, Wenfeng
;  APPLICANT:  Madden, Karen L.
;  APPLICANT:  Kelly, James D.
;  APPLICANT:  Sprecher, Cindy A.
;  APPLICANT:  Blumberg, Hal
;  APPLICANT:  Eagan, Maribeth A.
;  APPLICANT:  Jaspers, Stephen R.
;  APPLICANT:  Chandrasekher, Yasmin A.
;  APPLICANT:  No. 6610286ak, Julia E.
;  TITLE OF INVENTION: Method for Treating Inflammation
;  FILE REFERENCE: 99-108
;  CURRENT APPLICATION NUMBER: US/09/746,359A
;  CURRENT FILING DATE:  2001-05-21
;  PRIOR APPLICATION NUMBER: 60/171,969
;  PRIOR FILING DATE: 1999-12-23
;  PRIOR APPLICATION NUMBER: 60/213,341
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 72
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
;   LENGTH: 571
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-746-359A-53

  Query Match            100.0%;  Score 1263;  DB 4;  Length 571;
  Best Local Similarity  100.0%;  Pred. No. 2e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 399

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 459

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        460 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 519

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        520 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 571


RESULT 43
US-09-313-942-8
; Sequence 8, Application US/09313942
; Patent No. 6472179
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-A
;  CURRENT APPLICATION NUMBER: US/09/313,942
;  CURRENT FILING DATE:  1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 32
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 8
;   LENGTH: 592
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-313-942-8

  Query Match            100.0%;  Score 1263;  DB 4;  Length 592;
  Best Local Similarity  100.0%;  Pred. No. 2.1e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 540

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 592


RESULT 44
US-09-499-846-2
; Sequence 2, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
;  APPLICANT: Kavanaugh et al.
;  TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
;  TITLE OF INVENTION:  RECEPTOR-IMMUNOGLOBULIN FUSION
;  FILE REFERENCE: 035784/195012 (5784-
;  CURRENT APPLICATION NUMBER: US/09/499,846
;  CURRENT FILING DATE:  2000-02-07
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
;   LENGTH: 622
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-499-846-2

  Query Match            100.0%;  Score 1263;  DB 4;  Length 622;
  Best Local Similarity  100.0%;  Pred. No. 2.2e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 450

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        451 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 510

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        511 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 570

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        571 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 622
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RESULT 45
US-09-313-942-7
; Sequence 7, Application US/09313942
; Patent No. 6472179
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-A
;  CURRENT APPLICATION NUMBER: US/09/313,942
;  CURRENT FILING DATE:  1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 32
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
;   LENGTH: 859
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-313-942-7

  Query Match            100.0%;  Score 1263;  DB 4;  Length 859;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        622 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 681

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        682 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 741

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        742 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 801

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        802 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 853


RESULT 46
US-09-313-942-9
; Sequence 9, Application US/09313942
; Patent No. 6472179
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-A
;  CURRENT APPLICATION NUMBER: US/09/313,942
;  CURRENT FILING DATE:  1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 32
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 9
;   LENGTH: 951
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-313-942-9

  Query Match            100.0%;  Score 1263;  DB 4;  Length 951;
  Best Local Similarity   100.0%;  Pred. No. 4.1e-119;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 779

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 899

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 951


Search completed: February 10, 2005, 06:43:40
Job time : 46 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 9.56701 Seconds
(without alignments)
2333.257 Million cell updates/sec

Title: US-10-617-619A-7
Perfect score: 1263
Sequence: 1 EPKSCDKTHTCPPCPAPELL.....MHEALHNHYTQKSLSLSPGK 232

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1263	100.0	330	1	GHHU	Ig gamma-1 chain C
2	1257	99.5	374	2	S69339	Ig heavy chain V r
3	1255	99.4	255	4	S31866	Ig gamma-1 chain C
4	1210	95.8	234	2	PT0207	Ig gamma chain C r
5	1176	93.1	377	2	A23511	Ig gamma-3 chain C
6	1174	93.0	377	2	A60764	Ig gamma-3 chain C
7	1151	91.1	289	1	G3HUWI	Ig gamma-3 heavy c
8	1145	90.7	326	1	G2HU	Ig gamma-2 chain C
9	1135	89.9	327	1	G4HU	Ig gamma-4 chain C
10	921	72.9	323	1	GHRB	Ig gamma chain C r
11	906.5	71.8	328	2	I47160	Ig gamma 2b chain
12	906.5	71.8	328	2	I47159	Ig gamma 2a chain
13	903	71.5	277	2	I47162	Ig gamma 4 chain c
14	896	70.9	329	1	G2GP	Ig gamma-2 chain C
15	885.5	70.1	328	2	I47158	Ig gamma 1 chain c
16	878.5	69.6	328	2	I47161	Ig gamma 3 chain c
17	856	67.8	470	2	S22080	Ig heavy chain pre
18	847.5	67.1	308	2	C30554	Ig heavy chain C r
19	847.5	67.1	472	2	S31459	Ig gamma-1 chain -
20	845.5	66.9	329	1	G3MSC	Ig gamma-3 chain C
21	842	66.7	333	2	PS0018	Ig gamma-2b chain
22	834.5	66.1	398	1	G3MSM	Ig gamma-3 chain C
23	832.5	65.9	444	2	PC4436	monoclonal antibod
24	822.5	65.1	324	1	G1MS	Ig gamma-1 chain C
25	822.5	65.1	326	2	PS0017	Ig gamma-1 chain C
26	817.5	64.7	393	1	G1MSM	Ig gamma-1 chain C
27	809.5	64.1	329	2	S00847	Ig gamma-2c chain
28	809	64.1	330	1	G2MSA	Ig gamma-2a chain
29	809	64.1	469	2	S37483	Ig gamma-2a chain
30	805	63.7	335	1	G2MSAB	Ig gamma-2a chain
31	804	63.7	399	1	G2MSAM	Ig gamma-2a chain
32	794	62.9	446	2	S40295	Ig gamma-2a chain
33	785.5	62.2	322	2	PS0019	Ig gamma-2a chain
34	779.5	61.7	474	1	G2MS11	Ig gamma-2b chain
35	774.5	61.3	405	1	G2MSBM	Ig gamma-2b chain
36	764	60.5	327	2	S06611	Ig gamma-2 chain C
37	759.5	60.1	475	2	S01321	Ig gamma-2b chain
38	707	56.0	180	2	I46732	Ig gamma heavy cha
39	577.5	45.7	249	2	S69340	Ig heavy chain VHI
40	574.5	45.5	218	2	A36040	Ig heavy chain V-I
41	571	45.2	152	2	S14236	Ig gamma-1 chain C
42	395.5	31.3	572	2	B46529	Ig Y heavy chain (
43	364	28.8	549	2	S04845	Ig heavy chain pre
44	358	28.3	343	2	S25644	Ig mu chain C regi
45	358	28.3	453	2	S37768	Ig mu chain C regi

ALIGNMENTS

RESULT 1
GHHU
Ig gamma-1 chain C region - human
C;Species: Homo sapiens (man)
C;Date: 31-Jan-1981 #sequence_revision 18-Aug-1982 #text_change 09-Jul-2004
C;Accession: A93433; S36861; S33887; B90563; A90564; B91668; A91723; A02146
R;Ellison, J.W.; Berson, B.J.; Hood, L.E.
Nucleic Acids Res. 10, 4071-4079, 1982
A;Title: The nucleotide sequence of a human immunoglobulin C-gamma1 gene.
A;Reference number: A93433; MUID:82274238; PMID:6287432
A;Accession: A93433
A;Molecule type: DNA
A;Residues: 1-330 <ELL>
A;Cross-references: UNIPROT:P01857; EMBL:Z17370
A;Note: this sequence has the G1m(17) allotypic marker, 97-Lys, and the G1m(1) markers,
A;Note: Lys-330 is removed after translation
R;Harris, L.J.
submitted to the EMBL Data Library, October 1992
A;Reference number: S33904
A;Accession: S36861
A;Molecule type: DNA
A;Residues: 2-330 <HAR>
A;Cross-references: EMBL:Z17370
R;Takahashi, N.; Ueda, S.; Obata, M.; Nikaido, T.; Nakai, S.; Honjo, T.
Cell 29, 671-679, 1982
A;Title: Structure of human immunoglobulin gamma genes: implications for evolution of a
A;Reference number: S33887; MUID:83001943; PMID:6811139
A;Accession: S33887
A;Molecule type: DNA
A;Residues: 88-113;235-330 <TAK>
A;Cross-references: EMBL:Z17370
R;Cunningham, B.A.; Rutishauser, U.; Gall, W.E.; Gottlieb, P.D.; Waxdal, M.J.; Edelman,
Biochemistry 9, 3161-3170, 1970
A;Title: The covalent structure of a human gammaG-immunoglobulin. VII. Amino acid seque
A;Reference number: A90563; MUID:71064024; PMID:5489771
A;Contents: myeloma protein Eu
A;Accession: B90563
A;Molecule type: protein
A;Residues: 1-96,'R',98-135 <CUN>
A;Note: this sequence has the G1m(3) marker, 97-Arg
R;Rutishauser, U.; Cunningham, B.A.; Bennett, C.; Konigsberg, W.H.; Edelman, G.M.
Biochemistry 9, 3171-3181, 1970
A;Title: The covalent structure of a human gammaG-immunoglobulin. VIII. Amino acid sequ
A;Reference number: A90564; MUID:71064025; PMID:5530842
A;Contents: Eu
A;Accession: A90564
A;Molecule type: protein
A;Residues: 136-154,'Q',156-165,'Q',167-176,'Q',178-194,'N',196-197,'D',199-238,'E',240
A;Note: this sequence has the G1m(non-1) markers, 239-Glu and 241-Met
R;Ponstingl, H.; Hilschmann, N.
Hoppe-Seyler's Z. Physiol. Chem. 357, 1571-1604, 1976
A;Title: Die Primaerstruktur eines monoklonalen IgG1-Immunglobulins (Myelomprotein Nie)

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igen Primaerstruktur.
A;Reference number: A91668; MUID:77070269; PMID:826475
A;Contents: myeloma protein Nie
A;Accession: B91668
A;Molecule type: protein
A;Residues: 1-34,'Q',36-96,'K',98-115,'Q',117-197,'D',199-238,'D',240,'L',242-268,'E',27
A;Note: this sequence has the G1m(17) and G1m(1) markers
R;Schmidt, W.E.; Jung, H.D.; Palm, W.; Hilschmann, N.
Hoppe-Seyler's Z. Physiol. Chem. 364, 713-747, 1983
A;Title: Die Primaerstruktur des kristallisierbaren monoklonalen Immunglobulins IgG1 KOL
A;Reference number: A91723; MUID:83289131; PMID:6884994
A;Contents: myeloma protein KOL; disulfide bonds
A;Accession: A91723
A;Molecule type: protein
A;Residues: 1-96,'R',98-197,'D',199-238,'E',240,'M',242-266,'D',268-271,'D',273-330 <SCH
A;Note: this sequence has the G1m(3) and G1m(non-1) markers
R;Gall, W.E.; Edelman, G.M.
Biochemistry 9, 3188-3196, 1970
A;Title: The covalent structure of a human gammaG-immunoglobulin. X. Intrachain disulfid
A;Reference number: A90565; MUID:71064027; PMID:4923144
A;Contents: annotation; disulfide bonds
R;Dreker, L.; Schwarz, J.; Reichel, W.; Hilschmann, N.
Hoppe-Seyler's Z. Physiol. Chem. 357, 1515-1540, 1976
A;Title: Rule of antibody structure. The primary structure of monoclonal IgG1 immunoglob
enbromide cleavage products, and the disulfide bridges.
A;Reference number: A91667; MUID:77070267; PMID:1002129
A;Contents: annotation; disulfide bonds
C;Genetics:
A;Gene: GDB:IGHG1
A;Cross-references: GDB:120085; OMIM:147100
A;Map position: 14q32.33-14q32.33
A;Introns: 99/1; 114/1; 224/1
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into la
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;20-85/Domain: immunoglobulin homology <IM1>
F;137-206/Domain: immunoglobulin homology <IM2>
F;243-310/Domain: immunoglobulin homology <IM3>
F;27-83,144-204,250-308/Disulfide bonds: #status experimental
F;103/Disulfide bonds: interchain (to light chain) #status experimental
F;109,112/Disulfide bonds: interchain (to heavy chain) #status experimental
F;180/Binding site: carbohydrate (Asn) (covalent) #status experimental

  Query Match             100.0%;  Score 1263;  DB 1;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-89;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 2
S69339
Ig heavy chain V region precursor - human
C;Species: Homo sapiens (man)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 01-Dec-2000
C;Accession: S69339; S72664
R;Khamlichi, A.A.; Aucouturier, P.; Preud'homme, J.L.; Cogne, M.
Eur. J. Biochem. 229, 54-60, 1995
A;Title: Structure of abnormal heavy chains in human heavy-chain-deposition disease.
A;Reference number: S69339; MUID:95262687; PMID:7744049
A;Accession: S69339
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-374 <KHA>
A;Cross-references: EMBL:X81695
R;Khamlichi, A.A.
submitted to the EMBL Data Library, September 1994
A;Reference number: S72664
A;Accession: S72664
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-140,'C',142-374 <KH2>
A;Cross-references: EMBL:X81695
C;Superfamily: immunoglobulin C region; immunoglobulin homology

  Query Match             99.5%;  Score 1257;  DB 2;  Length 374;
  Best Local Similarity   99.1%;  Pred. No. 7.1e-89;
  Matches  230;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        143 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 202

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        203 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 262

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||:|:||||||||||||||||||||||||||||||||||||
Db        263 ISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 322

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        323 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 374


RESULT 3
S31866
Ig gamma-1 chain C region - synthetic
C;Species: synthetic
A;Note: Homo sapiens (man) gene engineered and expressed in Escherichia coli
C;Date: 06-Jan-1995 #sequence_revision 17-Mar-1997 #text_change 19-May-2000
C;Accession: S31866
R;Filpula, D.
submitted to the EMBL Data Library, February 1993
A;Description: Screeing method for protein-protein interactions of cloned gene products
A;Reference number: S31866
A;Accession: S31866
A;Molecule type: mRNA
A;Residues: 1-255 <FIL>
A;Cross-references: EMBL:X70421; NID:g33068; PIDN:CAA49866.1; PID:g33069
C;Keywords: immunoglobulin
F;1-22/Region: Escherichia coli outer membrane protein A precursor
F;23-255/Region: human Ig gamma-1 chain C region

  Query Match             99.4%;  Score 1255;  DB 4;  Length 255;
  Best Local Similarity   99.6%;  Pred. No. 6.3e-89;
  Matches  231;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         24 ESKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 255


RESULT 4
PT0207
Ig gamma chain C region - chimpanzee
C;Species: Pan troglodytes (chimpanzee)
C;Date: 23-Nov-1991 #sequence_revision 23-Nov-1991 #text_change 16-Jul-1999
C;Accession: PT0207
R;Ehrlich, P.H.; Moustafa, Z.A.; Oestberg, L.
Mol. Immunol. 28, 319-322, 1991
A;Title: Nucleotide sequence of chimpanzee Fc and hinge regions.
A;Reference number: PT0207; MUID:91287716; PMID:2062315
A;Accession: PT0207
A;Molecule type: mRNA
A;Residues: 1-234 <EHR>
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: immunoglobulin
F;48-117/Domain: immunoglobulin homology <IMM>

  Query Match             95.8%;  Score 1210;  DB 2;  Length 234;
  Best Local Similarity   98.7%;  Pred. No. 1.6e-85;
  Matches  222;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              |||||| ||||||| ||||||||||||||||||||||||||||||||||||||||||||||
Db         10 EPKSCDTTHTCPPCAAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 69

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         70 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 129

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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Db        130 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESSGQPENNYKTTP 189

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS 225
              |||||||||||||||||||||||||||||||||||||||||||||
Db        190 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKS 234


RESULT 5
A23511
Ig gamma-3 chain C region (allotype G3m(b)) - human
C;Species: Homo sapiens (man)
C;Date: 28-Dec-1987 #sequence_revision 28-Dec-1987 #text_change 23-Jul-1999
C;Accession: A23511
R;Huck, S.; Fort, P.; Crawford, D.H.; Lefranc, M.P.; Lefranc, G.
Nucleic Acids Res. 14, 1779-1789, 1986
A;Title: Sequence of a human immunoglobulin gamma 3 heavy chain constant region gene: cc
A;Reference number: A23511; MUID:86148507; PMID:3081877
A;Accession: A23511
A;Molecule type: DNA
A;Residues: 1-377 <HUC>
A;Cross-references: GB:X03604; GB:M12958; NID:g33070; PIDN:CAA27268.1; PID:g577056
C;Genetics:
A;Gene: GDB:IGHG3
A;Cross-references: GDB:119339; OMIM:147120
A;Map position: 14q32.33-14q32.33
A;Introns: 98/3; 115/3; 130/3; 145/3; 160/3; 270/3
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: immunoglobulin
F;20-85/Domain: immunoglobulin homology <IMM>

  Query Match             93.1%;  Score 1176;  DB 2;  Length 377;
  Best Local Similarity   92.7%;  Pred. No. 1.1e-82;
  Matches  215;  Conservative    8;  Mismatches    9;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||    || ||||||||||||||||||||||||||||||||||||||||||||:|
Db        146 EPKSCDTPPPCPRCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQF 205

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              |||||||||||||||||||||:|||||||||||||||||||||||||||||||||||||
Db        206 KWYVDGVEVHNAKTKPREEQYNSTFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 265

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||| |||||||||||||||:|:|||||||||||||||||||||||:||||||| |||
Db        266 ISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSGQPENNYNTTP 325

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNIFSCSVMHEALHNRFTQKSLSLSPGK 232
              |:|||||||||||||||||||||||:||||||||| :||||||||||
Db        326 PMLDSDGSFFLYSKLTVDKSRWQQGNIFSCSVMHEALHNRFTQKSLSLSPGK 377


RESULT 6
A60764
Ig gamma-3 chain C region, form LAT - human
C;Species: Homo sapiens (man)
C;Date: 14-May-1993 #sequence_revision 14-May-1993 #text_change 09-Jul-2004
C;Accession: A60764
R;Huck, S.; Lefranc, G.; Lefranc, M.P.
Immunogenetics 30, 250-257, 1989
A;Title: A human immunoglobulin IGHG3 allele (Gmb0, b1, c3, c5, u) with an IGHG4 conver
A;Reference number: A60764; MUID:90007613; PMID:2571587
A;Accession: A60764
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-377 <HUC>
A;Cross-references: UNIPROT:Q8N4Y9
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: immunoglobulin
F;20-85/Domain: immunoglobulin homology <IMM>

  Query Match             93.0%;  Score 1174;  DB 2;  Length 377;
  Best Local Similarity   92.7%;  Pred. No. 1.6e-82;
  Matches  215;  Conservative    8;  Mismatches    9;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||    || ||||||||||||||||||||||||||||||||||||||||||||:|
Db        146 EPKSCDTPPPCPRCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQF 205

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              |||||||||||||||||||||:|||||||||||||||||||||||||||||||||||||
Db        206 KWYVDGVEVHNAKTKPREEQYNSTFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 265

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||| |||||||||||||||:|:|||||||||||||||||||||||:||||||| |||
Db        266 ISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSGQPENNYNTTP 325

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||:|||||||:||||||||||||||| :||||||||||
Db        326 PVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNRFTQKSLSLSPGK 377


RESULT 7
G3HUWI
Ig gamma-3 heavy chain disease proteins - human
C;Species: Homo sapiens (man)
C;Date: 31-Dec-1979 #sequence_revision 23-Oct-1981 #text_change 16-Jul-1999
C;Accession: A90442; A92219; A90198; A93915; A02149
R;Frangione, B.; Rosenwasser, E.; Prelli, F.; Franklin, E.C.
Biochemistry 19, 4304-4308, 1980
A;Title: Primary structure of human gamma3 immunoglobulin deletion mutant: gamma3 heavy
A;Reference number: A90442; MUID:81021548; PMID:6774747
A;Contents: heavy chain disease protein Wis
A;Accession: A90442
A;Molecule type: protein
A;Residues: 1-289 <FRA>
A;Note: the molecule is a dimer linked by 12 disulfide bonds; it has an extra interchai
A;Note: this protein lacks most of the V region and all of the CH1 region. Residue 12 c
A;Note: the sequence of residues 42-76 was taken from the reference that follows
R;Michaelsen, T.E.; Frangione, B.; Franklin, E.C.
J. Biol. Chem. 252, 883-889, 1977
```

```
A;Title: Primary structure of the 'hinge' region of human IgG3. Probable quadruplication
A;Reference number: A92219; MUID:77118561; PMID:402363
A;Contents: normal gamma-3 chains, sequence corresponding to residues 12-97 of protein W
A;Accession: A92219
A;Molecule type: protein
A;Residues: 12-97 <MIC>
A;Note: the hinge region in gamma-3 chains is about four times as long as in other gamma
idue segment (12-28)
A;Note: cysteines at positions 24, 27, 33, 39, 42, 48, 54, 57, 63, 69, and 72 form inter
R;Wolfenstein-Todel, C.; Frangione, B.; Prelli, F.; Franklin, E.C.
Biochem. Biophys. Res. Commun. 71, 907-914, 1976
A;Title: The amino acid sequence of "heavy chain disease" protein ZUC. Structure of the
A;Reference number: A90198; MUID:77021516; PMID:823945
A;Contents: heavy chain disease protein Zuc, partial sequence corresponding to residues
A;Accession: A90198
A;Molecule type: protein
A;Residues: 59-125,'EB',128-226,228-289 <WOL>
A;Note: this protein lacks most of the V region, all of the CH1 region, and part of the
R;Alexander, A.; Steinmetz, M.; Barritault, D.; Frangione, B.; Franklin, E.C.; Hood, L.;
Proc. Natl. Acad. Sci. U.S.A. 79, 3260-3264, 1982
A;Title: gamma heavy chain disease in man: cDNA sequence supports partial gene deletion
A;Reference number: A93915; MUID:82247835; PMID:6808505
A;Contents: heavy chain disease protein Omm
A;Accession: A93915
A;Molecule type: mRNA
A;Residues: 12-70;72-114;116-125,'E',127-133,'L',135-136,'E',138,'Y',140-154,'D',156-157
A;Note: a carboxyl-terminal Lys is removed posttranslationally
A;Note: this sequence may represent an allelic form or another gamma chain subclass
C;Comment: The heavy chain disease protein Wis is shown.
C;Genetics:
A;Gene: GDB:IGHG3
A;Cross-references: GDB:119339; OMIM:147120
A;Map position: 14q32.33-14q32.33
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; immunoglobulin; pyroglutamic acid
F;203-270/Domain: immunoglobulin homology <IMM>
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;6,140/Binding site: carbohydrate (Asn) (covalent) #status experimental

  Query Match             91.1%;  Score 1151;  DB 1;  Length 289;
  Best Local Similarity   90.5%;  Pred. No. 6.7e-81;
  Matches  209;  Conservative   13;  Mismatches    9;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||    || ||||||||||||||||||||||||||||||||||||||||||||:|
Db         59 EPKSCDTPPPCPRCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQF 118

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||:||||||||||:|:|||:||||||||||:||:||||||||||||||||||||
Db        119 KWYVDGVQVHNAKTKPREQQFNSTFRVVSVLTVLHQNWLDGKEYKCKVSNKALPAPIEKT 178

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||| |||||||||||||||:|:|||||||||||||||||||||:||||||| |||
Db        179 ISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSGQPENNYNTTP 238

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG 231
              |:|||||||||||||||||||||:||||||||||| :||||||||||
Db        239 PMLDSDGSFFLYSKLTVDKSRWQQGNIFSCSVMHEALHNRFTQKSLSLSPG 289


RESULT 8
G2HU
Ig gamma-2 chain C region - human
C;Species: Homo sapiens (man)
C;Date: 30-Apr-1981 #sequence_revision 13-Jun-1983 #text_change 09-Jul-2004
C;Accession: A93906; A92809; A90752; A93132; A02148
R;Ellison, J.; Hood, L.
Proc. Natl. Acad. Sci. U.S.A. 79, 1984-1988, 1982
A;Title: Linkage and sequence homology of two human immunoglobulin gamma heavy chain con
A;Reference number: A93906; MUID:82197621; PMID:6804948
A;Accession: A93906
A;Molecule type: DNA
A;Residues: 1-326 <ELL>
A;Cross-references: UNIPROT:P01859; GB:V00554; GB:J00230; NID:g32759; PIDN:CAB58438.1;
A;Note: Lys-326 is probably removed posttranslationally
R;Wang, A.C.; Tung, E.; Fudenberg, H.H.
J. Immunol. 125, 1048-1054, 1980
A;Title: The primary structure of a human IgG2 heavy chain: genetic, evolutionary, and
A;Reference number: A92809; MUID:81007873; PMID:6774012
A;Contents: myeloma protein Til
A;Accession: A92809
A;Molecule type: protein
A;Residues: 1-19,'Q',21-57,'Z',59,'A',61-193,'D',195-325 <WAN>
A;Note: Trp-156 is at or near the complement-binding site
R;Connell, G.E.; Parr, D.M.; Hofmann, T.
Can. J. Biochem. 57, 758-767, 1979
A;Title: The amino acid sequences of the three heavy chain constant region domains of a
A;Reference number: A90752; MUID:80001357; PMID:113060
A;Contents: myeloma protein Zie
A;Accession: A90752
A;Molecule type: protein
A;Residues: 1-24,'E',26-57,'EV',60-85;132-171,'ZZZ',175,'B',177-193,'D',195-196,'Q',198
A;Note: this sequence has since been revised
R;Hofmann, T.; Parr, D.M.
Mol. Immunol. 16, 923-925, 1979
A;Title: A note on the amino acid sequence of residues 381-391 of human immunoglobulin
A;Reference number: A93132; MUID:80114419; PMID:118920
A;Contents: Zie
A;Accession: A93132
A;Molecule type: protein
A;Residues: 238-275 <HOF>
R;Hofmann, T.; Parr, D.M.
submitted to the Atlas, March 1980
A;Reference number: A94591
A;Contents: annotation; Zie, revisions to residues 25, 59, 60, and 264-268
A;Note: the revised sequence differs from that shown in having 60-Ala and in the amidat
ned
R;Milstein, C.; Frangione, B.
Biochem. J. 121, 217-225, 1971
A;Title: Disulphide bridges of the heavy chain of human immunoglobulin G2.
A;Reference number: A90253; MUID:72033500; PMID:4940472
A;Contents: annotation; myeloma protein Sa, disulfide bonds
R;Frangione, B.; Milstein, C.; Pink, J.R.L.
Nature 221, 145-148, 1969
A;Title: Structural studies of immunoglobulin G.
A;Reference number: A93157; MUID:69064124; PMID:5782707
A;Contents: annotation; Sa, disulfide bonds
C;Genetics:
A;Gene: GDB:IGHG2
A;Cross-references: GDB:119338; OMIM:147110
A;Map position: 14q32.33-14q32.33
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (ka
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into l
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;20-85/Domain: immunoglobulin homology <IM1>
F;133-202/Domain: immunoglobulin homology <IM2>
F;239-306/Domain: immunoglobulin homology <IM3>
F;14/Disulfide bonds: interchain (to light chain) #status experimental
F;27-83,140-200,246-304/Disulfide bonds: #status experimental
F;102,103,106,109/Disulfide bonds: interchain (to heavy chain) #status experimental
F;176/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             90.7%;  Score 1145;  DB 1;  Length 326;
  Best Local Similarity   91.4%;  Pred. No. 2.3e-80;
  Matches  212;  Conservative    9;  Mismatches    7;  Indels    4;  Gaps    2;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              | | | :   ||||||| : ||||||||||||||||||||||||||||||||||||:|
Db         99 ERKCCVE---CPPCPAPP-VAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQF 154

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||:|||:||||||||:||||||||||||||| ||||||||
Db        155 NWYVDGVEVHNAKTKPREEQFNSTFRVVSVLTVVHQDWLNGKEYKCKVSNKGLPAPIEKT 214

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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                ||| |||||||||||||||:|:|||||||||||||||||||||||||||||||||||||||
Db        215 ISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 274

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |:|||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 PMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 326


RESULT 9
G4HU
Ig gamma-4 chain C region - human
C;Species: Homo sapiens (man)
C;Date: 02-Apr-1982 #sequence_revision 02-Apr-1982 #text_change 09-Jul-2004
C;Accession: A90933; A90249; A02150
R;Ellison, J.; Buxbaum, J.; Hood, L.
DNA 1, 11-18, 1981
A;Title: Nucleotide sequence of a human immunoglobulin C-gamma4 gene.
A;Reference number: A90933; MUID:83157104; PMID:6299662
A;Accession: A90933
A;Molecule type: DNA
A;Residues: 1-327 <ELL>
A;Cross-references: UNIPROT:P01861
A;Note: the sequence was determined from the germline gene
R;Pink, J.R.L.; Buttery, S.H.; De Vries, G.M.; Milstein, C.
Biochem. J. 117, 33-47, 1970
A;Title: Human immunoglobulin sublclasses. Partial amino acid sequence of the constant r
A;Reference number: A90249; MUID:70207560; PMID:4192699
A;Accession: A90249
A;Molecule type: protein
A;Residues: 1-30;81-326 <PIN>
C;Genetics:
A;Gene: GDB:IGHG4
A;Cross-references: GDB:119340; OMIM:147130
A;Map position: 14q32.33-14q32.33
A;Introns: 99/1; 111/1; 221/1
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into la
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;20-85/Domain: immunoglobulin homology <IM1>
F;99-110/Region: hinge
F;134-203/Domain: immunoglobulin homology <IM2>
F;240-307/Domain: immunoglobulin homology <IM3>
F;14/Disulfide bonds: interchain (to light chain) #status experimental
F;27-83,141-201,247-305/Disulfide bonds: #status predicted
F;106,109/Disulfide bonds: interchain (to heavy chain) #status experimental
F;177/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             89.9%;  Score 1135;  DB 1;  Length 327;
  Best Local Similarity   93.7%;  Pred. No. 1.3e-79;
  Matches  208;  Conservative    8;  Mismatches    6;  Indels    0;  Gaps    0;

Qy         11 CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 70
              || ||||| |||||||||||||||||||||||||||||||| ||||||:||||||||||
Db        106 CPSCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVH 165

Qy         71 NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE 130
              |||||||||:|||||||||||||||||||||||||||| ||: |||||||||||||
Db        166 NAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPRE 225

Qy        131 PQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF 190
              |||||||||::|:|||||||||||||||||||||||||||||||||||||||||||||||
Db        226 PQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF 285

Qy        191 LYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||:|||||||||:|||||||||||||||||||||||| ||
Db        286 LYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK 327


RESULT 10
GHRB
Ig gamma chain C region - rabbit
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 24-Apr-1984 #sequence_revision 15-Nov-1984 #text_change 09-Jul-2004
C;Accession: A91749; A90290; A93928; A90245; A94416; A02161
R;Bernstein, K.E.; Alexander, C.B.; Mage, R.G.
Immunogenetics 18, 387-397, 1983
A;Title: Nucleotide sequence of a rabbit IgG heavy chain from the recombinant F-I haplo
A;Reference number: A91749; MUID:84030930; PMID:6313520
A;Accession: A91749
A;Molecule type: mRNA
A;Residues: 1-323 <BER>
A;Cross-references: UNIPROT:P01870
A;Note: this sequence has the d12 allotypic marker, 104-Thr, and the e14 marker, 185-Th
R;Pratt, D.M.; Mole, L.E.
Biochem. J. 151, 337-349, 1975
A;Title: Sequence studies on the constant region of the Fd sections of rabbit immunoglo
A;Reference number: A90290; MUID:76135469; PMID:1243651
A;Accession: A90290
A;Molecule type: protein
A;Residues: 1-47,'E',49-71,'PV',72-128 <PRA>
R;Martens, C.L.; Moore, K.W.; Steinmetz, M.; Hood, L.; Knight, K.L.
Proc. Natl. Acad. Sci. U.S.A. 79, 6018-6022, 1982
A;Title: Heavy chain genes of rabbit IgG; isolation of a cDNA encoding gamma heavy chai
A;Reference number: A93928; MUID:83299917; PMID:6193512
A;Accession: A93928
A;Molecule type: mRNA
A;Residues: 88-103,'M',105-143,'E',145-184,'A',186,'E',188-266 <MAR>
A;Cross-references: GB:M16426; NID:g165111; PIDN:AAA31289.1; PID:g165112
A;Note: this sequence has the d11 allotypic marker, 104-Met, and the e15 allotypic mark
R;Fruchter, R.G.; Jackson, S.A.; Mole, L.E.; Porter, R.R.
Biochem. J. 116, 249-259, 1970
A;Title: Sequence studies of the Fd section of the heavy chain of rabbit immunoglobulin
A;Reference number: A90245; MUID:70110015; PMID:5461106
A;Accession: A90245
A;Molecule type: protein
A;Residues: 132-143,'E',145-161 <FRU>
R;Hill, R.L.; Lebovitz, H.E.; Fellows Jr., R.E.; Delaney, R.
in Gamma Globulins, Nobel Symp. 3, Killander, J., ed., pp.109-127, Almqvist and Wiksell
A;Reference number: A94416
A;Accession: A94416
A;Molecule type: protein
A;Residues: 129-131;155-172,'D',174-184,'A',186,'E',188-200,'D',202-217,'E',219-232,'Q'
A;Note: this has the e15 allotypic marker, 185-Ala
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (ka
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into l
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;20-82/Domain: immunoglobulin homology <IM1>
F;130-199/Domain: immunoglobulin homology <IM2>
F;236-303/Domain: immunoglobulin homology <IM3>
F;173/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             72.9%;  Score 921;  DB 1;  Length 323;
  Best Local Similarity   67.3%;  Pred. No. 3.1e-63;
  Matches  167;  Conservative   31;  Mismatches   34;  Indels   16;  Gaps    2;

Qy          1 EPKSCDKTH----------TC--PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEV 44
              :| :|:  |           ||  | || ||||||||||:||||||||||||||||
Db         76 QPVTCNVAHPATNTKVDKTVAPSTCSKPTCPPPELLGGPSVFIFPPKPKDTLMISRTPEV 135

Qy         45 TCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEY 104
              |||||||| :||||:| ||::  :|  |:   ||:|:||| |||| | : ||||| |||:
Db        136 TCVVVDVSQDDPEVQFTWYINNEQVRTARPPLREQQFNSTIRVVSTLPITHQDWLRGKEF 195

Qy        105 KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAV 164
              |||| ||||||||||||:||| ||:|||: | |:||:   |||||:: |||||||:|
Db        196 KCKVHNKALPAPIEKTISKARGQPLEPKVYTMGPPREELSSRSVSLTCMINGFYPSDISV 255

Qy        165 EWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQK 224
              ||| ||: |:|||||| |||||||:|||:||:|  | ||:|:||:|||||||||||||
Db        256 EWEKNGKAEDNYKTTPAVLDSDGSYFLYNKLSVPTSEWQRGDVFTCSVMHEALHNHYTQK 315

Qy        225 SLSLSPGK 232
              |:| ||||
Db        316 SISRSPGK 323
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RESULT 11
I47160
Ig gamma 2b chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47160
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a s
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47160
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03780; NID:g433125; PIDN:AAA52218.1; PID:g433126
C;Genetics:
A;Gene: IgG2b
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

  Query Match             71.8%;  Score 906.5;  DB 2;  Length 328;
  Best Local Similarity   73.2%;  Pred. No. 4.1e-62;
  Matches  164;  Conservative   29;  Mismatches   28;  Indels    3;  Gaps    2;

Qy         11 CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 70
              || ||| |   |||||:||||||||||||||:||||||||  |:|||:|:|||||||||
Db        106 CPICPACE-SPGPSVFIFPPKPKDTLMISRTPQVTCVVVDVSQENPEVQFSWYVDGVEVH 164

Qy         71 NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE 130
              |:|:|:|||:|||||||||| : |||||||||:||||:|| ||||| : ||||||| ||
Db        165 TAQTRPKEEQFNSTYRVVSVLPIQHQDWLNGKEFKCKVNNKDLPAPITRIISKAKGQTRE 224

Qy        131 PQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVLDSDGS 188
              ||||||||  :||::::||:|||| |||| || |||: |||  || ||:||||  | ||:
Db        225 PQVYTLPPHAEELSRSKVSITCLVIGFYPPDIDVEWQRNGQPEPEGNYRTTPPQQDVDGT 284

Qy        189 FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              :||||| :|||: || | :| |:|||||||||||||:| :|||
Db        285 YFLYSKFSVDKASWQQGGIFQCAVMHEALHNHYTQKSISKTPGK 328


RESULT 12
I47159
Ig gamma 2a chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47159
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a s
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47159
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03779; NID:g433123; PIDN:AAA52217.1; PID:g433124
C;Genetics:
A;Gene: IgG2a
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

  Query Match             71.8%;  Score 906.5;  DB 2;  Length 328;
  Best Local Similarity   73.2%;  Pred. No. 4.1e-62;
  Matches  164;  Conservative   29;  Mismatches   28;  Indels    3;  Gaps    2;

Qy         11 CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH 70
              || ||| |   |||||:||||||||||||||:||||||||  |:|||:|:|||||||||
Db        106 CPICPACE-SPGPSVFIFPPKPKDTLMISRTPQVTCVVVDVSQENPEVQFSWYVDGVEVH 164

Qy         71 NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE 130
              |:|:|:|||:|||||||||| : |||||||||:||||:|| ||||| : ||||||| ||
Db        165 TAQTRPKEEQFNSTYRVVSVLPIQHQDWLNGKEFKCKVNNKDLPAPITRIISKAKGQTRE 224

Qy        131 PQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVLDSDGS 188
              ||||||||  :||::::||:|||| |||| || |||: |||  || ||:||||  | ||:
Db        225 PQVYTLPPHAEELSRSKVSITCLVIGFYPPDIDVEWQRNGQPEPEGNYRTTPPQQDVDGT 284

Qy        189 FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              :||||| :|||: || | :| |:|||||||||||||:| :|||
Db        285 YFLYSKFSVDKASWQQGGIFQCAVMHEALHNHYTQKSISKTPGK 328


RESULT 13
I47162
Ig gamma 4 chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47162
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47162
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-277 <KAC>
A;Cross-references: EMBL:U03782; NID:g433129; PIDN:AAA52220.1; PID:g433130
C;Genetics:
A;Gene: IgG4
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;82-151/Domain: immunoglobulin homology <IMM>

  Query Match             71.5%;  Score 903;  DB 2;  Length 277;
  Best Local Similarity   72.1%;  Pred. No. 6.2e-62;
  Matches  165;  Conservative   29;  Mismatches   31;  Indels    4;  Gaps    3;

Qy          8 THTCPPCP-APELLG-GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD 65
              | | |||| |   | ||| |:|||||||||||||:|||||||| |:|||:|:||||
Db         49 TKTKPPCPICPACEGPGPSAFIFPPKPKDTLMISRTPKVTCVVVDVSQENPEVQFSWYVD 108

Qy         66 GVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK 125
              ||||| |:|:|:|||:|||||||||| : |||||||||:||||:|| ||||| : |||||
Db        109 GVEVHTAQTRPKEEQFNSTYRVVSVLPIQHQDWLNGKEFKCKVNNKDLPAPITRIISKAK 168

Qy        126 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVL 183
              || |||||||||  :||::::|:||||| |||| || |||: |||  || ||:||||
Db        169 GQTREPQVYTLPPPTEELSRSKVTLTCLVTGFYPPDIDVEWQRNGQPEPEGNYRTTPPQQ 228

Qy        184 DSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              | ||::|||||| |||: ||:|: | |:|||||||||||||:  :|||
Db        229 DVDGTYFLYSKLAVDKASWQRGDTFQCAVMHEALHNHYTQKSIFKTPGK 277


RESULT 14
G2GP
Ig gamma-2 chain C region - guinea pig
C;Species: Cavia porcellus (guinea pig)
C;Date: 07-May-1981 #sequence_revision 07-May-1981 #text_change 09-Jul-2004
C;Accession: A94553; A90352; A90359; A90384; A90385; A02151
R;Trischmann, T.M.
submitted to the Atlas, April 1975
A;Reference number: A94553
A;Accession: A94553
A;Molecule type: protein
A;Residues: 1-3 <TRI>
A;Cross-references: UNIPROT:P01862
R;Birshtein, B.K.; Hussain, Q.Z.; Cebra, J.J.
Biochemistry 10, 18-25, 1971
A;Title: Structure of heavy chain from strain 13 guinea pig immunoglobulin-G(2). III. Au
A;Reference number: A90352; MUID:71058471; PMID:5538606
A;Accession: A90352
A;Molecule type: protein
A;Residues: 4-68 <BIR>
R;Turner, K.J.; Cebra, J.J.
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Biochemistry 10, 9-17, 1971
A;Title: Structure of heavy chain from strain 13 guinea pig immunoglobulin-G(2). II. Ami
A;Reference number: A90359; MUID:71058486; PMID:5538616
A;Accession: A90359
A;Molecule type: protein
A;Residues: 69-133;312-329 <TUR>
R;Tracey, D.E.; Cebra, J.J.
Biochemistry 13, 4796-4803, 1974
A;Title: Primary structure of the C-H2 homology region from guinea pig IgG2 antibodies.
A;Reference number: A90384; MUID:75036072; PMID:4429665
A;Accession: A90384
A;Molecule type: protein
A;Residues: 134-226 <TRA>
R;Trischmann, T.M.; Cebra, J.J.
Biochemistry 13, 4804-4811, 1974
A;Title: Primary structure of the C-H3 homology region from guinea pig IgG2 antibodies.
A;Reference number: A90385; MUID:75036073; PMID:4609467
A;Accession: A90385
A;Molecule type: protein
A;Residues: 227-311 <TR2>
R;Oliveira, B.; Lamm, M.E.
Biochemistry 10, 26-31, 1971
A;Title: Interchain disulfide bridges of guinea pig gamma-2- immunoglobulin.
A;Reference number: A90354; MUID:71058474; PMID:4922544
A;Contents: annotation; disulfide bonds
A;Note: Cys-16 is involved in a heavy-light chain bond
A;Note: Cys-105, Cys-107, and Cys-110 form inter-heavy chain bonds
C;Comment: This chain was isolated from pooled serum of strain 13 inbred guinea pigs.
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into la
C;Superfamily: immunoglobulin C region; immunoglobulin homology
C;Keywords: duplication; glycoprotein; heterotetramer; immunoglobulin
F;21-81/Domain: immunoglobulin homology <IM1>
F;135-204/Domain: immunoglobulin homology <IM2>
F;241-310/Domain: immunoglobulin homology <IM3>
F;28-79/Disulfide bonds: #status experimental
F;142-202/Disulfide bonds: #status experimental
F;178/Binding site: carbohydrate (Asn) (covalent) #status experimental
F;248-308/Disulfide bonds: #status experimental

  Query Match             70.9%;  Score 896;  DB 1;  Length 329;
  Best Local Similarity   70.4%;  Pred. No. 2.6e-61;
  Matches  164;  Conservative   25;  Mismatches   38;  Indels    6;  Gaps    2;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              :|  |    ||| || || |||||||:|||||||||||| || |||||||| ::|||:|
Db        101 ZPBPC----TCPKCPPPENLGGPSVFIFPPKPKDTLMISLTPRVTCVVVDVSQDEPEVQF 156

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               |:||   | ||:|||| ||||:|:|| ||| : ||||| |||:|||| ||||||||||
Db        157 TWFVDNKPVGNAETKPRVEQYNTTFRVESVLPIQHQDWLRGKEFKCKVYNKALPAPIEKT 216

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQP--ENNYKT 178
              ||| || || | ||||||||||:|::||:|||:  |:|:|| ||| ||  |  |  ||
Db        217 ISKTKGAPRMPDVYTLPPSRDELSKSKVSVTCLIINFFPADIHVEWASNRVPVSEKEYKN 276

Qy        179 TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG 231
              |||: |:|||:|||||||||| | || |::|||||||||| |||::| |||
Db        277 TPPIEDADGSYFLYSKLTVDKSAWDQGTVYTCSVMHEALHNHVTQKAISRSPG 329


RESULT 15
I47158
Ig gamma 1 chain constant region - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C;Accession: I47158
R;Kacskovics, I.; Sun, J.; Butler, J.E.
J. Immunol. 153, 3565-3573, 1994
A;Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a s
A;Reference number: I47158; MUID:95015845; PMID:7930579
A;Accession: I47158
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-328 <KAC>
A;Cross-references: EMBL:U03778; NID:g433121; PIDN:AAA52216.1; PID:g433122
C;Genetics:
A;Gene: IgG1
C;Superfamily: immunoglobulin C region; immunoglobulin homology
F;133-202/Domain: immunoglobulin homology <IMM>

  Query Match             70.1%;  Score 885.5;  DB 2;  Length 328;
  Best Local Similarity   72.4%;  Pred. No. 1.7e-60;
  Matches  163;  Conservative   27;  Mismatches   32;  Indels    3;  Gaps    2;

Qy         10 TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV 69
              ||| ||  | : |||||:||||||||||||:|||||||||||| |  ||:|:||||||||
Db        105 TCPICPGCE-VAGPSVFIFPPKPKDTLMISQTPEVTCVVVDVSKEHAEVQFSWYVDGVEV 163

Qy         70 HNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR 129
              | |:|:|:|||:|||||||||| : ||||| |||:||||:|  |||||  :|||||  || |
Db        164 HTAETRPKEEQFNSTYRVVSVLPIQHQDWLKGKEFKCKVNNVDLPAPITRTISKAIGQSR 223

Qy        130 EPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVLDSDG 187
              |||||||||  :||:::::|:||||| |||| || |||:||||  |||  |:||||  | ||
Db        224 EPQVYTLPPPAEELSRSKVTLTCLVIGFYPPDIHVEWKSNGQPEPENTYRTTPPQQDVDG 283

Qy        188 SFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              :||||||| |||:||  |: | |:|||||||||||||:| : ||
Db        284 TFFLYSKLAVDKARWDHGDKFECAVMHEALHNHYTQKSISKTQGK 328


Search completed: February 10, 2005, 05:43:56
Job time : 11.567 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 10, 2005, 05:40:01 ; Search time 33.7503 Seconds
(without alignments)
3520.040 Million cell updates/sec

Title: US-10-617-619A-7
Perfect score: 1263
Sequence: 1 EPKSCDKTHTCPPCPAPELL.....MHEALHNHYTQKSLSLSPGK 232

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1263	100.0	330	1	GC1_HUMAN	P01857 homo sapien
2	1263	100.0	465	2	Q6GMX6	Q6gmx6 homo sapien
3	1263	100.0	466	2	Q6IN78	Q6in78 homo sapien
4	1263	100.0	469	2	Q7Z7P5	Q7z7p5 homo sapien
5	1263	100.0	470	2	Q6PJA4	Q6pja4 homo sapien
6	1263	100.0	470	2	Q7Z5W1	Q7z5w1 homo sapien
7	1263	100.0	472	2	Q6N089	Q6n089 homo sapien
8	1263	100.0	475	2	Q6GMW7	Q6gmw7 homo sapien
9	1263	100.0	476	2	Q6GMX1	Q6gmx1 homo sapien
10	1263	100.0	679	2	Q96PQ8	Q96pq8 homo sapien
11	1259	99.7	473	2	Q6P055	Q6p055 homo sapien
12	1259	99.7	475	2	Q6MZQ6	Q6mzq6 homo sapien
13	1259	99.7	480	2	Q6N094	Q6n094 homo sapien
14	1259	99.7	481	2	Q6N097	Q6n097 homo sapien
15	1259	99.7	482	2	Q7Z351	Q7z351 homo sapien
16	1257	99.5	348	2	Q6PYX1	Q6pyx1 homo sapien
17	1257	99.5	473	2	Q6MZV7	Q6mzv7 homo sapien
18	1257	99.5	478	2	Q6PI81	Q6pi81 homo sapien
19	1257	99.5	480	2	Q6PJF1	Q6pjf1 homo sapien
20	1256	99.4	466	2	Q6N096	Q6n096 homo sapien
21	1252	99.1	475	2	Q6N095	Q6n095 homo sapien
22	1252	99.1	544	2	Q6PJ95	Q6pj95 homo sapien
23	1234	97.7	487	2	Q65ZL2	Q65zl2 mus sp. fv/
24	1176	93.1	354	2	Q86TT2	Q86tt2 homo sapien
25	1176	93.1	518	2	Q6N030	Q6n030 homo sapien
26	1172	92.8	521	2	Q8N4Y9	Q8n4y9 homo sapien
27	1161	91.9	509	2	Q8NF17	Q8nf17 homo sapien
28	1156	91.5	290	1	GC3_HUMAN	P01860 homo sapien
29	1145	90.7	326	1	GC2_HUMAN	P01859 homo sapien
30	1145	90.7	417	2	Q6N093	Q6n093 homo sapien
31	1142	90.4	464	2	Q6MZU6	Q6mzu6 homo sapien
32	1140	90.3	465	2	Q6P6C4	Q6p6c4 homo sapien
33	1135	89.9	327	1	GC4_HUMAN	P01861 homo sapien
34	1135	89.9	473	2	Q8TC63	Q8tc63 homo sapien
35	1131	89.5	493	2	Q68CN4	Q68cn4 homo sapien
36	1126	89.2	476	2	Q6MZX7	Q6mzx7 homo sapien
37	921	72.9	323	1	GC_RABIT	P01870 oryctolagus
38	915.5	72.5	337	2	Q95M34	Q95m34 equus cabal
39	896	70.9	329	1	GC2_CAVPO	P01862 cavia porce
40	845.5	66.9	329	1	GC3_MOUSE	P22436 mus musculu
41	845.5	66.9	470	2	Q7TMK1	Q7tmk1 mus musculu
42	842	66.7	333	1	GCB_RAT	P20761 rattus norv
43	834.5	66.1	303	2	Q6KAM2	Q6kam2 mus musculu
44	834.5	66.1	398	1	GC3M_MOUSE	P03987 mus musculu
45	833.5	66.0	463	2	Q99LC4	Q99lc4 mus musculu

ALIGNMENTS

RESULT 1
GC1_HUMAN
ID GC1_HUMAN STANDARD; PRT; 330 AA.
AC P01857;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Ig gamma-1 chain C region.
GN Name=IGHG1;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=82274238; PubMed=6287432;
RA Ellison J.W., Berson B.J., Hood L.E.;
RT "The nucleotide sequence of a human immunoglobulin C gamma1 gene.";
RL Nucleic Acids Res. 10:4071-4079(1982).
RN [2]
RP SEQUENCE OF 1-135 (MYELOMA PROTEIN EU).
RX MEDLINE=71064024; PubMed=5489771;
RA Cunningham B.A., Rutishauser U., Gall W.E., Gottlieb P.D.,
RA Waxdal M.J., Edelman G.M.;
RT "The covalent structure of a human gamma G-immunoglobulin. VII. Amino
RT acid sequence of heavy-chain cyanogen bromide fragments H1-H4.";
RL Biochemistry 9:3161-3170(1970).
RN [3]
RP SEQUENCE OF 136-329 (EU).
RX MEDLINE=71064025; PubMed=5530842;
RA Rutishauser U., Cunningham B.A., Bennett C., Konigsberg W.H.,
RA Edelman G.M.;
RT "The covalent structure of a human gamma G-immunoglobulin. 8. Amino
RT acid sequence of heavy-chain cyanogen bromide fragments H5-H7.";
RL Biochemistry 9:3171-3181(1970).
RN [4]
RP SEQUENCE (MYELOMA PROTEIN NIE).
RX MEDLINE=77070269; PubMed=826475;
RA Ponstingl H., Hilschmann N.;
RT "The rule of antibody structure. The primary structure of a monoclonal
RT IgG1 immunoglobulin (myeloma protein Nie). III. The chymotryptic
RT peptides of the H-chain, alignment of the tryptic peptides and
RT discussion of the complete structure.";
RL Hoppe-Seyler's Z. Physiol. Chem. 357:1571-1604(1976).
RN [5]
RP SEQUENCE (MYELOMA PROTEIN KOL), AND DISULFIDE BONDS.
RX MEDLINE=83289131; PubMed=6884994;
RA Schmidt W.E., Jung H.-D., Palm W., Hilschmann N.;
RT "Three-dimensional structure determination of antibodies. Primary
RT structure of crystallized monoclonal immunoglobulin IgG1 KOL, I.";
RL Hoppe-Seyler's Z. Physiol. Chem. 364:713-747(1983).
RN [6]
RP DISULFIDE BONDS.
RX MEDLINE=71064027; PubMed=4923144;

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RA   Gall W.E., Edelman G.M.;
RT   "The covalent structure of a human gamma G-immunoglobulin. X.
RT   Intrachain disulfide bonds.";
RL   Biochemistry 9:3188-3196(1970).
RN   [7]
RP   DISULFIDE BONDS.
RX   MEDLINE=77070267; PubMed=1002129;
RA   Dreker L., Schwarz J., Reichel W., Hilschmann N.;
RT   "Rule of antibody structure. The primary structure of a monoclonal
RT   IgG1 immunoglobulin (myeloma protein Nie), I: purification and
RT   characterization of the protein, the L- and H-chains, the cyanogen
RT   bromide cleavage products, and the disulfide bridges.";
RL   Hoppe-Seyler's Z. Physiol. Chem. 357:1515-1540(1976).
RN   [8]
RP   X-RAY CRYSTALLOGRAPHY (2.9 ANGSTROMS).
RX   MEDLINE=81208100; PubMed=7236608;
RA   Deisenhofer J.;
RT   "Crystallographic refinement and atomic models of a human Fc fragment
RT   and its complex with fragment B of protein A from Staphylococcus
RT   aureus at 2.9- and 2.8-A resolution.";
RL   Biochemistry 20:2361-2370(1981).
CC   -!- MISCELLANEOUS: Nie has the G1M(17) allotypic marker, 97-K, and the
CC       G1M(1) markers, 239-D and 241-L. KOL and EU sequences have the
CC       G1M(3) marker and the G1M (non-1) markers.
CC   -!- MISCELLANEOUS: Nie also differs in the amidation states of 35,
CC       116, 198, 269 and 272.
CC   -!- MISCELLANEOUS: EU also differs in the amidation states of residues
CC       155, 166, 177, 195, 198, 269, and 272 and in the order of residues
CC       268-272.
CC   -!- MISCELLANEOUS: KOL also differs in the amidation states of
CC       residues 198, 267 and 272.
CC   ----------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; J00228; AAC82527.1; ALT_INIT.
DR   PIR; A93433; GHHU.
DR   PDB; 1AJ7; X-ray; H=1-103.
DR   PDB; 1D5B; X-ray; B/H=1-101.
DR   PDB; 1D5I; X-ray; H=1-101.
DR   PDB; 1D6V; X-ray; H=1-101.
DR   PDB; 1DN2; X-ray; A/B=120-326.
DR   PDB; 1E4K; X-ray; A/B=106-329.
DR   PDB; 1FC1; X-ray; A/B=106-329.
DR   PDB; 1FC2; X-ray; D=106-329.
DR   PDB; 1FCC; X-ray; A=121-326.
DR   PDB; 1HZH; X-ray; H/K=1-330.
DR   PDB; 1I7Z; X-ray; B/D=1-103.
DR   PDB; 1IIS; X-ray; A/B=107-330.
DR   PDB; 1IIX; X-ray; A/B=107-330.
DR   PDB; 1L6X; X-ray; A=120-326.
DR   PDB; 1OQX; X-ray; A/B=119-330.
DR   PDB; 2RCS; X-ray; H=1-103.
DR   Genew; HGNC:5525; IGHG1.
DR   MIM; 147100; -.
DR   GO; GO:0005624; C:membrane fraction; NAS.
DR   GO; GO:0003823; F:antigen binding; TAS.
DR   GO; GO:0006955; P:immune response; NAS.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003006; Ig_MHC.
DR   Pfam; PF00047; ig; 3.
DR   PROSITE; PS50835; IG_LIKE; 3.
DR   PROSITE; PS00290; IG_MHC; 2.
KW   3D-structure; Direct protein sequencing; Glycoprotein;
KW   Immunoglobulin C region; Immunoglobulin domain.
FT   NON_TER       1      1
FT   DOMAIN        1     98       CH1.
FT   DOMAIN       99    110       Hinge.
FT   DOMAIN      111    223       CH2.
FT   DOMAIN      224    330       CH3.
FT   DISULFID     27     83
FT   DISULFID    103    103       Interchain (with light chain).
FT   DISULFID    109    109       Interchain (with heavy chain).
FT   DISULFID    112    112       Interchain (with heavy chain).
FT   DISULFID    144    204
FT   DISULFID    250    308
FT   CARBOHYD    180    180       N-linked (GlcNAc. . .).
FT   VARIANT      97     97       K -> R (in G1M(3) marker).
FT                                /FTId=VAR_003886.
FT   VARIANT     239    239       D -> E (in G1M(non-1) marker).
FT                                /FTId=VAR_003887.
FT   VARIANT     241    241       L -> M (in G1M(non-1) marker).
FT                                /FTId=VAR_003888.
FT   STRAND       23     24
FT   STRAND       26     33
FT   STRAND       38     38
FT   STRAND       41     41
FT   TURN         42     45
FT   TURN         48     49
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FT   TURN         59     61
FT   STRAND       62     71
FT   HELIX        73     75
FT   TURN         76     78
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FT   TURN         88     91
FT   STRAND       92     97
FT   TURN        102    103
FT   STRAND      122    126
FT   HELIX       130    134
FT   TURN        136    137
FT   STRAND      141    149
FT   STRAND      157    162
FT   TURN        163    164
FT   STRAND      165    167
FT   STRAND      171    172
FT   STRAND      176    177
FT   TURN        179    180
FT   STRAND      183    190
FT   HELIX       193    197
FT   TURN        198    199
FT   STRAND      202    207
FT   TURN        209    210
FT   STRAND      215    219
FT   STRAND      227    227
FT   STRAND      230    234
FT   HELIX       238    242
FT   STRAND      245    256
FT   STRAND      261    266
FT   TURN        267    268
FT   STRAND      269    270
FT   STRAND      274    276
FT   STRAND      280    281
FT   TURN        283    284
FT   STRAND      287    296
FT   HELIX       297    301
FT   TURN        302    303
FT   STRAND      306    311
FT   TURN        313    314
FT   HELIX       316    318
FT   STRAND      319    324
SQ   SEQUENCE   330 AA;  36106 MW;  3770EE106C2FA33D CRC64;

  Query Match           100.0%;  Score 1263;  DB 1;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 1.2e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158
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Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
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RESULT 2
Q6GMX6
ID Q6GMX6 PRELIMINARY; PRT; 465 AA.
AC Q6GMX6;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Primary B-Cells;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Primary B-Cells;
RA Strausberg R.;
RL Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
DR EMBL; BC073766; AAH73766.1; -.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig_c1.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; C1-set; 3.
DR Pfam; PF00047; ig; 4.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IGc1; 3.
DR SMART; SM00406; IGv; 1.
DR PROSITE; PS50835; IG_LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW Hypothetical protein.
SQ SEQUENCE 465 AA; 51083 MW; B3A9B7D0FDB1386E CRC64;

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  Query Match           100.0%;  Score 1263;  DB 2;  Length 465;
  Best Local Similarity  100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465
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RESULT 3
Q6IN78
ID Q6IN78 PRELIMINARY; PRT; 466 AA.
AC Q6IN78;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE IGHG1 protein.
GN Name=IGHG1;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Peripheral Nervous System;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Peripheral Nervous System;
RA Strausberg R.;
RL Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
DR EMBL; BC072419; AAH72419.1; -.
DR HSSP; P01861; 1ADQ.
DR InterPro; IPR003599; Ig.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig_c1.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; C1-set; 3.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IGc1; 3.
DR SMART; SM00406; IGv; 1.
DR PROSITE; PS50835; IG_LIKE; 4.

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DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
SQ   SEQUENCE   466 AA;  50853 MW;  53EB0BCEDE81076E CRC64;

  Query Match           100.0%;  Score 1263;  DB 2;  Length 466;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        235 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 294

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 354

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        355 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 414

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        415 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 466


RESULT 4
Q7Z7P5
ID   Q7Z7P5       PRELIMINARY;      PRT;   469 AA.
AC   Q7Z7P5;
DT   01-OCT-2003 (TrEMBLrel. 25, Created)
DT   01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   IGHG1 protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RA   Strausberg R.;
RL   Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC051328; AAH51328.1; -.
DR   HSSP; P01857; 1HZH.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00406; IGv; 1.
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DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
SQ   SEQUENCE   469 AA;  51395 MW;  C8D5BE12BAAF795C CRC64;

  Query Match           100.0%;  Score 1263;  DB 2;  Length 469;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        238 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 297

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        298 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 357

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        358 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 417

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        418 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 469


RESULT 5
Q6PJA4
ID   Q6PJA4       PRELIMINARY;      PRT;   470 AA.
AC   Q6PJA4;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Primary B-Cells;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Primary B-Cells;
RA   Strausberg R.;
RL   Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC018747; AAH18747.1; -.
DR   HSSP; P01861; 1ADQ.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
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DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   470 AA;  51715 MW;  7B49556A11FD7D99 CRC64;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 6
Q7Z5W1
ID   Q7Z5W1      PRELIMINARY;      PRT;   470 AA.
AC   Q7Z5W1;
DT   01-OCT-2003 (TrEMBLrel. 25, Created)
DT   01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RA   Strausberg R.;
RL   Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC053984; AAH53984.1; -.
DR   HSSP; P01857; 1HZH.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   470 AA;  51204 MW;  778CF34521483E1A CRC64;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 7
Q6N089
ID   Q6N089      PRELIMINARY;      PRT;   472 AA.
AC   Q6N089;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein DKFZp686P15220.
GN   Name=DKFZp686P15220;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Human rectum tumor;
RG   The German Human cDNA Consortium;
RA   Wambutt R., Heubner D., Mewes H.W., Weil B., Amid C., Osanger A.,
RA   Fobo G., Han M., Wiemann S.;
RL   Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BX640627; CAE45781.1; -.
DR   HSSP; P01861; 1ADQ.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   472 AA;  51724 MW;  26CB340D0046D279 CRC64;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 472;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 300

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 420

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 472


RESULT 8
Q6GMW7
ID   Q6GMW7      PRELIMINARY;      PRT;   475 AA.
AC   Q6GMW7;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RA   Strausberg R.;
RL   Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC073782; AAH73782.1; -.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   Pfam; PF00047; ig; 4.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   475 AA;  51987 MW;  2A1FE55D736860F8 CRC64;

  Query Match           100.0%;  Score 1263;  DB 2;  Length 475;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 9
Q6GMX1
ID   Q6GMX1      PRELIMINARY;      PRT;   476 AA.
AC   Q6GMX1;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Spleen;
RA   Strausberg R.;
RL   Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC073773; AAH73773.1; -.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   Pfam; PF00047; ig; 4.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
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DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   476 AA;  52286 MW;  622AABA5C62DDE9D CRC64;

  Query Match           100.0%;  Score 1263;  DB 2;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 10
Q96PQ8
ID   Q96PQ8      PRELIMINARY;      PRT;   679 AA.
AC   Q96PQ8;
DT   01-DEC-2001 (TrEMBLrel. 19, Created)
DT   01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   Factor VII active site mutant immunoconjugate.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=21477448; PubMed=11593034; DOI=10.1073/pnas.201420298;
RA   Hu Z., Garen A.;
RT   "Targeting tissue factor on tumor vascular endothelial cells and tumor
RT   cells for immunotherapy in mouse models of prostatic cancer.";
RL   Proc. Natl. Acad. Sci. U.S.A. 98:12180-12185(2001).
RN   [2]
RP   SEQUENCE FROM N.A.
RA   Hu Z., Garen A.;
RL   Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AF272774; AAK58686.2; -.
DR   HSSP; P08709; 1KLI.
DR   GO; GO:0005576; C:extracellular; IEA.
DR   GO; GO:0005509; F:calcium ion binding; IEA.
DR   GO; GO:0008233; F:peptidase activity; IEA.
DR   GO; GO:0004295; F:trypsin activity; IEA.
DR   GO; GO:0006508; P:proteolysis and peptidolysis; IEA.
DR   InterPro; IPR000152; Asx_hydroxyl_S.
DR   InterPro; IPR000742; EGF_2.
DR   InterPro; IPR001881; EGF_Ca.
DR   InterPro; IPR006209; EGF_like.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR001254; Peptidase_S1.
DR   InterPro; IPR009003; Pept_Ser_Cys.
DR   InterPro; IPR000294; VitK_dep_GLA.
DR   Pfam; PF07654; C1-set; 2.
DR   Pfam; PF00008; EGF; 1.
DR   Pfam; PF00594; Gla; 1.
DR   Pfam; PF00089; Trypsin; 1.
DR   SMART; SM00179; EGF_CA; 1.
DR   SMART; SM00069; GLA; 1.
DR   SMART; SM00407; IGc1; 1.
DR   SMART; SM00020; Tryp_SPc; 1.
DR   PROSITE; PS00010; ASX_HYDROXYL; UNKNOWN_1.
DR   PROSITE; PS00022; EGF_1; UNKNOWN_1.
DR   PROSITE; PS01186; EGF_2; 1.
DR   PROSITE; PS50026; EGF_3; 1.
DR   PROSITE; PS01187; EGF_CA; 1.
DR   PROSITE; PS00011; GLA_1; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_1.
DR   PROSITE; PS50240; TRYPSIN_DOM; 1.
DR   PROSITE; PS00134; TRYPSIN_HIS; UNKNOWN_1.
DR   PROSITE; PS00135; TRYPSIN_SER; 1.
KW   EGF-like domain; Hydrolase; Protease; Serine protease.
SQ   SEQUENCE   679 AA;  75552 MW;  0B0023AE70A067A1 CRC64;

  Query Match           100.0%;  Score 1263;  DB 2;  Length 679;
  Best Local Similarity  100.0%;  Pred. No. 2.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        448 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 507

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        508 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 567

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        568 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 627

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        628 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 679


RESULT 11
Q6P055
ID   Q6P055      PRELIMINARY;      PRT;   473 AA.
AC   Q6P055;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Peripheral Nervous System;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA   Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA   Jones S.J., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
```

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RP   SEQUENCE FROM N.A.
RC   TISSUE=Peripheral Nervous System;
RA   Strausberg R.;
RL   Submitted (JAN-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC065820; AAH65820.1; -.
DR   HSSP; P01861; 1ADQ.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   473 AA;  51344 MW;  9816D56A77129B57 CRC64;

  Query Match            99.7%;  Score 1259;  DB 2;  Length 473;
  Best Local Similarity  99.6%;  Pred. No. 3.8e-91;
  Matches  231;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 421

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||| ||||||||||||||||
Db        422 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEGLHNHYTQKSLSLSPGK 473


RESULT 12
Q6MZQ6
ID   Q6MZQ6      PRELIMINARY;      PRT;   475 AA.
AC   Q6MZQ6;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein DKFZp686G11190.
GN   Name=DKFZp686G11190;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Human esophagus tumor;
RG   The German Human cDNA Consortium;
RA   Lauber J., Bahr A., Mewes H.W., Weil B., Amid C., Osanger A., Fobo G.,
RA   Han M., Wiemann S.;
RL   Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BX640947; CAE45972.1; -.
DR   HSSP; P01861; 1ADQ.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   475 AA;  52043 MW;  B7EAE255A26F4B8E CRC64;

  Query Match            99.7%;  Score 1259;  DB 2;  Length 475;
  Best Local Similarity  99.6%;  Pred. No. 3.8e-91;
  Matches  231;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||| ||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEGLHNHYTQKSLSLSPGK 475


RESULT 13
Q6N094
ID   Q6N094      PRELIMINARY;      PRT;   480 AA.
AC   Q6N094;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein DKFZp686O01196.
GN   Name=DKFZp686O01196;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Human esophagus tumor;
RG   The German Human cDNA Consortium;
RA   Wambutt R., Heubner D., Mewes H.W., Weil B., Amid C., Osanger A.,
RA   Fobo G., Han M., Wiemann S.;
RL   Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BX640622; CAE45776.1; -.
DR   HSSP; P01861; 1ADQ.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   480 AA;  52612 MW;  225247F3D35AEC18 CRC64;

  Query Match            99.7%;  Score 1259;  DB 2;  Length 480;
  Best Local Similarity  99.6%;  Pred. No. 3.9e-91;
  Matches  231;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
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Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368
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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||| ||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEGLHNHYTQKSLSLSPGK 480


RESULT 14
Q6N097
ID   Q6N097      PRELIMINARY;      PRT;   481 AA.
AC   Q6N097;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE   Hypothetical protein DKFZp686H20196.
GN   Name=DKFZp686H20196;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Human esophagus tumor;
RG   The German Human cDNA Consortium;
RA   Wambutt R., Heubner D., Mewes H.W., Weil B., Amid C., Osanger A.,
RA   Fobo G., Han M., Wiemann S.;
RL   Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BX640619; CAE45773.1; -.
DR   HSSP; P01861; 1ADQ.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00407; IGc1; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   481 AA;  52759 MW;  47220D9E64BDF98B CRC64;

  Query Match             99.7%;  Score 1259;  DB 2;  Length 481;
  Best Local Similarity   99.6%;  Pred. No. 3.9e-91;
  Matches  231;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        250 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 309

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        310 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 369

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        370 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 429

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||| ||||||||||||||||
Db        430 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEGLHNHYTQKSLSLSPGK 481


RESULT 15
Q7Z351
ID   Q7Z351      PRELIMINARY;      PRT;   482 AA.
AC   Q7Z351;
DT   01-OCT-2003 (TrEMBLrel. 25, Created)
DT   01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   Hypothetical protein DKFZp686N02209.
GN   Name=DKFZp686N02209;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   TISSUE=Human rectum tumor;
RA   Bloecker H., Boecher M., Mewes H.W., Weil B., Amid C., Osanger A.,
RA   Fobo G., Han M., Wiemann S.;
RL   Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BX538118; CAD98026.1; -.
DR   HSSP; P01857; 1HZH.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003597; Ig_c1.
DR   InterPro; IPR003006; Ig_MHC.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF07654; C1-set; 3.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 4.
DR   PROSITE; PS00290; IG_MHC; UNKNOWN_2.
KW   Hypothetical protein.
SQ   SEQUENCE   482 AA;  52852 MW;  EDA75F1901D1A034 CRC64;

  Query Match             99.7%;  Score 1259;  DB 2;  Length 482;
  Best Local Similarity   99.6%;  Pred. No. 3.9e-91;
  Matches  231;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        251 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 310

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        311 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 370

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        371 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 430

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||| ||||||||||||||||
Db        431 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEGLHNHYTQKSLSLSPGK 482


Search completed: February 10, 2005, 05:46:09
Job time : 35.7503 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 10, 2005, 06:40:32 ; Search time 72 Seconds
(without alignments)
1246.228 Million cell updates/sec

Title: US-10-617-619A-7
Perfect score: 1263
Sequence: 1 EPKSCDKTHTCPPCPAPELL.....MHEALHNHYTQKSLSLSPGK 232

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 334

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%
Maximum Match 100%
Listing first 500 summaries

Database : A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1263	100.0	232	2	AAW26232	Aaw26232 Human IgG
2	1263	100.0	232	3	AAB28690	Aab28690 Human IgG
3	1263	100.0	232	4	AAB80897	Aab80897 Human IgG
4	1263	100.0	232	4	AAY72915	Aay72915 Human par
5	1263	100.0	232	5	AAE15347	Aae15347 Human imm
6	1263	100.0	232	5	AAE26272	Aae26272 Human IgG
7	1263	100.0	232	7	ADJ65991	Adj65991 Herpes vi
8	1263	100.0	232	8	ADJ57512	Adj57512 Human IgG
9	1263	100.0	232	8	ADR48992	Adr48992 Human IgG
10	1263	100.0	233	5	ABB09463	Abb09463 Human IgG
11	1263	100.0	235	6	ABJ38647	Abj38647 pCXFc pro
12	1263	100.0	235	6	ADA89055	Ada89055 Plasmid p
13	1263	100.0	235	7	ADD25647	Add25647 Binding d
14	1263	100.0	235	7	ADG74307	Adg74307 Fibroblas
15	1263	100.0	247	5	AAE26274	Aae26274 Human bet
16	1263	100.0	251	5	ABB81490	Abb81490 Human imm
17	1263	100.0	251	6	AAE35214	Aae35214 Human wil
18	1263	100.0	259	2	AAY24154	Aay24154 Protein f
19	1263	100.0	267	5	AAE26273	Aae26273 Human tPA
20	1263	100.0	269	8	ADJ52120	Adj52120 CH1 delet
21	1263	100.0	287	4	AAB47590	Aab47590 Fusion pr
22	1263	100.0	329	2	AAR91806	Aar91806 Human imm
23	1263	100.0	329	8	ADP56389	Adp56389 Human PRO
24	1263	100.0	329	8	ADS82579	Ads82579 Human IgG
25	1263	100.0	330	4	AAB04071	Aab04071 Zcytor 10
26	1263	100.0	330	5	AAM47856	Aam47856 Human Ig-
27	1263	100.0	330	5	AAE21960	Aae21960 Human dea
28	1263	100.0	330	5	ABB81641	Abb81641 Human IgG
29	1263	100.0	330	5	ABB05736	Abb05736 Human imm
30	1263	100.0	330	6	ABP71856	Abp71856 Human IgG
31	1263	100.0	330	6	AAE32915	Aae32915 Human imm
32	1263	100.0	330	6	AAE32627	Aae32627 Human imm
33	1263	100.0	330	6	ABR82103	Abr82103 Human DR6
34	1263	100.0	330	6	AAO31102	Aao31102 Human A2-
35	1263	100.0	330	6	ABR55836	Abr55836 Anti-Ang-
36	1263	100.0	330	6	AAO30893	Aao30893 Human imm
37	1263	100.0	330	7	ADF11389	Adf11389 Anti-OPGL
38	1263	100.0	330	7	ADE97351	Ade97351 Human IgG
39	1263	100.0	330	7	ADF83605	Adf83605 Cytokine
40	1263	100.0	330	7	ADF75001	Adf75001 Human Ig
41	1263	100.0	330	8	ADM41537	Adm41537 Anti-inte
42	1263	100.0	330	8	ADM68911	Adm68911 Human IgG
43	1263	100.0	330	8	ADN36570	Adn36570 Chemokine
44	1263	100.0	330	8	ADN97485	Adn97485 Artificia
45	1263	100.0	330	8	ADR43460	Adr43460 Heavy cha
46	1263	100.0	330	8	ADR31605	Adr31605 Human IgG
47	1263	100.0	330	8	ADS87909	Ads87909 Anti-IFN-
48	1263	100.0	330	8	ADN33230	Adn33230 IgG1-CH h
49	1263	100.0	330	8	ADS94906	Ads94906 Anti-IFN-
50	1263	100.0	331	3	AAY91106	Aay91106 Human TR-
51	1263	100.0	331	6	ABU05197	Abu05197 Human exp
52	1263	100.0	332	8	ADL35095	Adl35095 Human IgG
53	1263	100.0	333	8	ADJ95912	Adj95912 Human IgG
54	1263	100.0	333	8	ADL22761	Adl22761 Human ant
55	1263	100.0	351	2	AAR43685	Aar43685 Human kap
56	1263	100.0	356	8	ADJ95976	Adj95976 Immunoglo
57	1263	100.0	358	6	ABP98040	Abp98040 Amino aci
58	1263	100.0	367	8	ADF73150	Adf73150 RELP-Fc f
59	1263	100.0	371	1	AAP91918	Aap91918 Sequence
60	1263	100.0	371	1	AAP93558	Aap93558 Linkered
61	1263	100.0	376	2	AAW60037	Aaw60037 Antigenic
62	1263	100.0	377	6	ABJ37105	Abj37105 Concatame
63	1263	100.0	377	8	ADQ79914	Adq79914 Human CTL
64	1263	100.0	379	2	AAW49073	Aaw49073 Recombina
65	1263	100.0	379	2	AAW83962	Aaw83962 Recombina
66	1263	100.0	388	5	ABB07681	Abb07681 MOG-Fc fu
67	1263	100.0	388	6	ADA14289	Ada14289 Mutated M
68	1263	100.0	388	6	ADA14265	Ada14265 Human imm
69	1263	100.0	396	2	AAW18574	Aaw18574 Aggrecana
70	1263	100.0	396	2	AAW18575	Aaw18575 Aggrecana
71	1263	100.0	396	8	ADF57557	Adf57557 Mouse ymk
72	1263	100.0	400	3	AAY15123	Aay15123 Porcine C
73	1263	100.0	404	5	AAU97108	Aau97108 Mouse MK6
74	1263	100.0	423	3	AAB28693	Aab28693 Fc-huAGP-
75	1263	100.0	424	2	AAW14765	Aaw14765 Human sol
76	1263	100.0	424	2	AAW14764	Aaw14764 Human sol
77	1263	100.0	426	3	AAB28695	Aab28695 Fc-muAGP-
78	1263	100.0	435	2	AAR26530	Aar26530 Sequence
79	1263	100.0	437	2	AAW10552	Aaw10552 Alpha-1-a
80	1263	100.0	437	6	ABJ37104	Abj37104 Concatame
81	1263	100.0	437	8	ADQ79912	Adq79912 Human CD2
82	1263	100.0	439	8	ADO47876	Ado47876 Alpha-Her
83	1263	100.0	440	7	ADJ66000	Adj66000 Herpes vi
84	1263	100.0	440	8	ADP03589	Adp03589 Infection
85	1263	100.0	441	3	AAB28692	Aab28692 Fc-huAGP-
86	1263	100.0	442	2	AAW10550	Aaw10550 IgG1 poly
87	1263	100.0	442	6	ABR39465	Abr39465 Humanised
88	1263	100.0	442	6	ABR39474	Abr39474 Humanised
89	1263	100.0	442	6	ABU08311	Abu08311 Humanised
90	1263	100.0	442	6	ABU08320	Abu08320 Humanised
91	1263	100.0	442	6	ABR39793	Abr39793 Humanised
92	1263	100.0	442	6	ABB80113	Abb80113 Deglycosy
93	1263	100.0	442	6	ABB80109	Abb80109 Heavy cha
94	1263	100.0	442	7	ADE94066	Ade94066 Humanised
95	1263	100.0	442	7	ADE94075	Ade94075 Humanised
96	1263	100.0	442	7	ADH54473	Adh54473 Human imm
97	1263	100.0	442	8	ADN61714	Adn61714 Humanised
98	1263	100.0	444	6	AAE35327	Aae35327 Humanised

99	1263	100.0	444	6	AAE34876	Aae34876	BIWA4/8 a
100	1263	100.0	444	8	ADL15443	Adl15443	Humanised
101	1263	100.0	444	8	ADO00851	Ado00851	Humanised
102	1263	100.0	445	2	AAY24153	Aay24153	Bovine LO
103	1263	100.0	445	6	AAO31101	Aao31101	Human A2-
104	1263	100.0	445	7	ADF11421	Adf11421	2E11 anti
105	1263	100.0	445	7	ADF11429	Adf11429	18B2 anti
106	1263	100.0	446	2	AAW05829	Aaw05829	Humanised
107	1263	100.0	446	7	ADF11425	Adf11425	2D8 anti-
108	1263	100.0	446	7	ADF11437	Adf11437	9H7 anti-
109	1263	100.0	446	7	ADF11433	Adf11433	16E1 anti
110	1263	100.0	446	7	ADF11417	Adf11417	22B3 anti
111	1263	100.0	446	8	ADR19328	Adr19328	Chimeric
112	1263	100.0	447	2	AAY31669	Aay31669	Human IgG
113	1263	100.0	447	7	ADL35333	Adl35333	Human ant
114	1263	100.0	447	8	ADQ31274	Adq31274	Humanised
115	1263	100.0	447	8	ADQ31271	Adq31271	Murine 11
116	1263	100.0	447	8	ADQ31276	Adq31276	Humanised
117	1263	100.0	447	8	ADQ66378	Adq66378	Novel hum
118	1263	100.0	447	8	ADR19327	Adr19327	Chimeric
119	1263	100.0	447	8	ADS87928	Ads87928	Anti-IFN-
120	1263	100.0	447	8	ADS87924	Ads87924	Anti-IFN-
121	1263	100.0	447	8	ADS87926	Ads87926	Anti-IFN-
122	1263	100.0	447	8	ADS87939	Ads87939	Anti-IFN-
123	1263	100.0	447	8	ADS94936	Ads94936	Anti-IFN-
124	1263	100.0	447	8	ADS94923	Ads94923	Anti-IFN-
125	1263	100.0	447	8	ADS94921	Ads94921	Anti-IFN-
126	1263	100.0	447	8	ADS94925	Ads94925	Anti-IFN-
127	1263	100.0	448	3	AAB28694	Aab28694	Fc-muAGP-
128	1263	100.0	448	5	AAM49203	Aam49203	Humanised
129	1263	100.0	448	8	ADF71908	Adf71908	Hu3G8VH-1
130	1263	100.0	448	8	ADP84969	Adp84969	Chimeric
131	1263	100.0	449	2	AAR43339	Aar43339	Completel
132	1263	100.0	449	2	AAW49816	Aaw49816	Amino aci
133	1263	100.0	449	6	ABP58273	Abp58273	Humanised
134	1263	100.0	449	8	ADI35159	Adi35159	Humanised
135	1263	100.0	450	6	ABG74713	Abg74713	Murine hu
136	1263	100.0	450	7	ABR83153	Abr83153	Hu007 ant
137	1263	100.0	450	8	ADS18704	Ads18704	Protein s
138	1263	100.0	450	8	ADS18706	Ads18706	Protein s
139	1263	100.0	450	8	ADS18710	Ads18710	Protein s
140	1263	100.0	450	8	ADS18702	Ads18702	Protein s
141	1263	100.0	450	8	ADS18708	Ads18708	Protein s
142	1263	100.0	451	4	AAE12715	Aae12715	Human rec
143	1263	100.0	451	5	AAU81014	Aau81014	B7-relate
144	1263	100.0	451	6	ABU58807	Abu58807	Mucin 1 (
145	1263	100.0	451	8	ADL92472	Adl92472	Antibody
146	1263	100.0	451	8	ADL92469	Adl92469	Antibody
147	1263	100.0	451	8	ADP88494	Adp88494	Humanised
148	1263	100.0	452	2	AAY30201	Aay30201	Heavy cha
149	1263	100.0	452	4	AAY97591	Aay97591	Flt1 rece
150	1263	100.0	452	5	ABP52444	Abp52444	Mutation
151	1263	100.0	453	6	ABP58287	Abp58287	Humanised
152	1263	100.0	453	6	ABP96295	Abp96295	4A5-3.1.1
153	1263	100.0	459	2	AAR42066	Aar42066	Human ant
154	1263	100.0	459	8	ADR86700	Adr86700	Ephrin B2
155	1263	100.0	459	8	ADR82647	Adr82647	Human B2E
156	1263	100.0	460	3	AAY69890	Aay69890	Human NR8
157	1263	100.0	461	2	AAR42162	Aar42162	Anti-HIV-
158	1263	100.0	461	4	AAU07745	Aau07745	Humanised
159	1263	100.0	461	6	ABR39844	Abr39844	Hu266 N56
160	1263	100.0	461	6	ABR39847	Abr39847	Hu266 N56
161	1263	100.0	461	6	ABR39843	Abr39843	Hu266 N56
162	1263	100.0	461	6	ABR39848	Abr39848	Hu266 N56
163	1263	100.0	461	6	ABJ39025	Abj39025	Fusion pr
164	1263	100.0	462	4	AAY97592	Aay97592	Flt1 rece
165	1263	100.0	462	5	ABP52445	Abp52445	Mutation
166	1263	100.0	462	6	ABJ39027	Abj39027	Fusion pr
167	1263	100.0	462	8	ADM97598	Adm97598	Mouse mon
168	1263	100.0	463	8	ADM72025	Adm72025	Chimeric
169	1263	100.0	465	4	AAB72228	Aab72228	Humanised
170	1263	100.0	465	7	ADL23152	Adl23152	Mouse/hum
171	1263	100.0	465	7	ADL23135	Adl23135	Mouse/hum
172	1263	100.0	465	7	ADL23150	Adl23150	Mouse/hum
173	1263	100.0	467	2	AAR22759	Aar22759	Reshaped
174	1263	100.0	467	2	AAR22758	Aar22758	Reshaped
175	1263	100.0	467	7	ADM05608	Adm05608	Human pro
176	1263	100.0	467	8	ADM41567	Adm41567	Anti-inte
177	1263	100.0	468	5	AAE27928	Aae27928	Human C5E
178	1263	100.0	468	6	ABB82837	Abb82837	Antibody
179	1263	100.0	468	6	ABP58275	Abp58275	Humanised
180	1263	100.0	468	8	ADR46819	Adr46819	Human ant
181	1263	100.0	469	8	ADM41555	Adm41555	Anti-inte
182	1263	100.0	469	8	ADM41561	Adm41561	Anti-inte
183	1263	100.0	470	2	AAR22757	Aar22757	Reshaped
184	1263	100.0	470	3	AAU77289	Aau77289	Protein #
185	1263	100.0	470	5	AAE27923	Aae27923	Human C2B
186	1263	100.0	470	6	ABB82832	Abb82832	Antibody
187	1263	100.0	470	7	ADB65576	Adb65576	Human pro
188	1263	100.0	470	8	ADM72027	Adm72027	Chimeric
189	1263	100.0	470	8	ADM72031	Adm72031	Chimeric
190	1263	100.0	471	3	AAY45030	Aay45030	HUMAN OCR
191	1263	100.0	471	7	ADM05609	Adm05609	Human pro
192	1263	100.0	471	7	ADM05600	Adm05600	Human pro
193	1263	100.0	471	8	ADM72029	Adm72029	Chimeric
194	1263	100.0	471	8	ADR09218	Adr09218	Human pro
195	1263	100.0	472	6	ABP58289	Abp58289	Humanised
196	1263	100.0	472	7	ADM05388	Adm05388	Human pro
197	1263	100.0	472	8	ADQ66377	Adq66377	Novel hum
198	1263	100.0	472	8	ADS88783	Ads88783	Sequence
199	1263	100.0	473	4	AAG64475	Aag64475	Human typ
200	1263	100.0	473	4	AAG64471	Aag64471	Human typ
201	1263	100.0	473	4	AAG64469	Aag64469	Human typ
202	1263	100.0	473	4	AAG64473	Aag64473	Human typ
203	1263	100.0	473	7	ADM05599	Adm05599	Human pro
204	1263	100.0	473	8	ADM97513	Adm97513	CD1d-IgG-
205	1263	100.0	474	7	ADM05597	Adm05597	Human pro
206	1263	100.0	475	2	AAR20057	Aar20057	Heavy cha
207	1263	100.0	475	2	AAR93553	Aar93553	Monoclona
208	1263	100.0	475	2	AAW11641	Aaw11641	Human ant
209	1263	100.0	475	2	AAW11639	Aaw11639	Human ant
210	1263	100.0	475	4	AAG63640	Aag63640	Amino aci
211	1263	100.0	475	7	ADM47075	Adm47075	Mouse ant
212	1263	100.0	475	8	ADL23053	Adl23053	Mouse/hum
213	1263	100.0	475	8	ADL23056	Adl23056	Humanised
214	1263	100.0	475	8	ADS88794	Ads88794	A mouse/h
215	1263	100.0	475	8	ADS88805	Ads88805	Humanised
216	1263	100.0	476	2	AAR31023	Aar31023	Antibody
217	1263	100.0	476	2	AAW01818	Aaw01818	Primatise
218	1263	100.0	476	2	AAW01822	Aaw01822	Primatise
219	1263	100.0	476	2	AAW63761	Aaw63761	Macaque p
220	1263	100.0	476	2	AAW63765	Aaw63765	Macaque p
221	1263	100.0	476	2	AAW88464	Aaw88464	Monoclona
222	1263	100.0	476	5	AAU11539	Aau11539	Protein s
223	1263	100.0	476	5	AAU11646	Aau11646	Protein s
224	1263	100.0	476	6	AAE37360	Aae37360	Monkey 7C
225	1263	100.0	476	7	ABR61564	Abr61564	Human MAb
226	1263	100.0	476	7	ADM05603	Adm05603	Human pro
227	1263	100.0	477	2	AAW90207	Aaw90207	hB7.2Fc s
228	1263	100.0	477	7	ADM05604	Adm05604	Human pro
229	1263	100.0	477	8	ADQ65990	Adq65990	Novel hum
230	1263	100.0	477	8	ADR10018	Adr10018	Human pro
231	1263	100.0	478	2	AAW63763	Aaw63763	Macaque p
232	1263	100.0	478	5	AAU11644	Aau11644	Protein s
233	1263	100.0	478	6	AAE37362	Aae37362	Monkey 7B
234	1263	100.0	478	8	ADQ67023	Adq67023	Novel hum
235	1263	100.0	480	2	AAW90206	Aaw90206	hB7.1Fc s
236	1263	100.0	480	5	AAU81008	Aau81008	BSL1-Ig f
237	1263	100.0	480	6	AAO16239	Aao16239	B7-relate
238	1263	100.0	480	6	AAO16238	Aao16238	B7-relate
239	1263	100.0	480	6	ABU07263	Abu07263	Human exp
240	1263	100.0	481	2	AAR24442	Aar24442	Sequence
241	1263	100.0	489	5	AAO19052	Aao19052	Cell adhe
242	1263	100.0	492	7	ADD25783	Add25783	Binding d
243	1263	100.0	497	3	AAY97172	Aay97172	Human FGF
244	1263	100.0	499	5	ABG31025	Abg31025	Synthetic

245	1263	100.0	499	7	ADD25587	Add25587 Binding d
246	1263	100.0	499	7	ADD25454	Add25454 Binding d
247	1263	100.0	499	7	ADM42729	Adm42729 2H7scFv-I
248	1263	100.0	500	7	ADD25679	Add25679 Binding d
249	1263	100.0	502	8	ADM97493	Adm97493 CD1d-IgG-
250	1263	100.0	504	7	ADD25787	Add25787 Binding d
251	1263	100.0	525	3	AAY97171	Aay97171 Human FGF
252	1263	100.0	527	5	AAM47467	Aam47467 Human IL-
253	1263	100.0	534	2	AAR26531	Aar26531 Sequence
254	1263	100.0	541	5	AAE29077	Aae29077 Human IL-
255	1263	100.0	543	7	ADD25784	Add25784 Binding d
256	1263	100.0	547	4	AAB85279	Aab85279 Human IL-
257	1263	100.0	547	5	ABG67210	Abg67210 Interleuk
258	1263	100.0	547	5	AAE23362	Aae23362 Human IL-
259	1263	100.0	547	8	ADJ83334	Adj83334 Human IL-
260	1263	100.0	557	4	AAY97590	Aay97590 Flt1 rece
261	1263	100.0	557	5	ABP52443	Abp52443 Mutation
262	1263	100.0	558	5	AAE29076	Aae29076 Human IL-
263	1263	100.0	567	4	AAY97597	Aay97597 Flt1 rece
264	1263	100.0	567	4	AAY97593	Aay97593 Flt1 rece
265	1263	100.0	567	5	ABP52442	Abp52442 Flt1(1-3)
266	1263	100.0	567	5	ABP52446	Abp52446 Mutation
267	1263	100.0	567	5	AAE13733	Aae13733 Human Zal
268	1263	100.0	571	4	AAB85278	Aab85278 Human IL-
269	1263	100.0	571	4	AAU04065	Aau04065 Human IL-
270	1263	100.0	571	5	ABG67209	Abg67209 Interleuk
271	1263	100.0	571	5	AAE23359	Aae23359 Human IL-
272	1263	100.0	571	8	ADJ83333	Adj83333 Human IL-
273	1263	100.0	581	4	AAB81972	Aab81972 Gangliosi
274	1263	100.0	581	8	ADP03590	Adp03590 Infection
275	1263	100.0	582	4	AAB81987	Aab81987 Gangliosi
276	1263	100.0	582	4	AAB81991	Aab81991 Gangliosi
277	1263	100.0	583	4	AAB83156	Aab83156 Gangliosi
278	1263	100.0	585	5	AAE18130	Aae18130 Human IL-
279	1263	100.0	585	5	AAM47466	Aam47466 Human IL-
280	1263	100.0	585	8	ADE83331	Ade83331 Human IL-
281	1263	100.0	592	2	AAW70797	Aaw70797 Human int
282	1263	100.0	592	3	AAY92185	Aay92185 Human IL-
283	1263	100.0	592	7	ABW02165	Abw02165 Human IL-
284	1263	100.0	595	2	AAW86003	Aaw86003 Anti-5T4
285	1263	100.0	608	6	ABJ37102	Abj37102 Concatame
286	1263	100.0	608	8	ADQ79908	Adq79908 Human tum
287	1263	100.0	613	8	ADR46827	Adr46827 Human bet
288	1263	100.0	622	3	AAY97170	Aay97170 Human FGF
289	1263	100.0	631	1	AAP93009	Aap93009 Genetic c
290	1263	100.0	631	3	AAB19508	Aab19508 CD4-IgG1
291	1263	100.0	631	3	AAY51079	Aay51079 Human fus
292	1263	100.0	631	3	AAY59169	Aay59169 CD4-Ig fu
293	1263	100.0	641	8	ADJ57513	Adj57513 Human FVI
294	1263	100.0	649	8	ADM97531	Adm97531 CD1d-IgG
295	1263	100.0	652	2	AAW48650	Aaw48650 Heavy cha
296	1263	100.0	658	3	AAY96782	Aay96782 Ephrin-B2
297	1263	100.0	659	6	ABJ37103	Abj37103 Concatame
298	1263	100.0	659	8	ADQ79910	Adq79910 Human tum
299	1263	100.0	679	8	ADJ57516	Adj57516 Human FVI
300	1263	100.0	683	3	AAY96781	Aay96781 Ephrin-B1
301	1263	100.0	685	3	AAY96777	Aay96777 Ang-1-FD-
302	1263	100.0	686	3	AAY96778	Aay96778 Ang-2-FD-
303	1263	100.0	689	3	AAY96779	Aay96779 Ang-1-FD-
304	1263	100.0	689	3	AAY96780	Aay96780 Ang-2-FD-
305	1263	100.0	690	3	AAY92195	Aay92195 Human IL-
306	1263	100.0	698	5	AAU81012	Aau81012 B7-relate
307	1263	100.0	698	6	AAO16237	Aao16237 B7-relate
308	1263	100.0	701	8	ADJ57511	Adj57511 Human FVI
309	1263	100.0	713	8	ADN97491	Adn97491 Artificia
310	1263	100.0	715	8	ADN97489	Adn97489 Artificia
311	1263	100.0	729	1	AAP93008	Aap93008 Genetic c
312	1263	100.0	729	3	AAB19507	Aab19507 CD4-IgG1
313	1263	100.0	729	3	AAY59168	Aay59168 CD4-Ig fu
314	1263	100.0	731	4	AAM52156	Aam52156 Humanised
315	1263	100.0	741	4	AAM52159	Aam52159 Humanised
316	1263	100.0	754	3	AAB11691	Aab11691 Human sec
317	1263	100.0	771	8	ADR86699	Adr86699 Ephrin B4
318	1263	100.0	771	8	ADR82646	Adr82646 Human B4E
319	1263	100.0	787	3	AAB11693	Aab11693 Human sec
320	1263	100.0	859	2	AAW70796	Aaw70796 Human gp1
321	1263	100.0	859	3	AAY92184	Aay92184 Human gp1
322	1263	100.0	859	7	ABW02164	Abw02164 Human gp1
323	1263	100.0	951	2	AAW70798	Aaw70798 Human gp1
324	1263	100.0	951	3	AAY92186	Aay92186 Human gp1
325	1263	100.0	951	7	ABW02166	Abw02166 Human gp1
326	1263	100.0	961	3	AAY92187	Aay92187 Human gp1
327	1263	100.0	963	2	AAW70540	Aaw70540 Integrin
328	1263	100.0	972	7	ADG87101	Adg87101 Glucoamyl
329	1263	100.0	975	7	ADG87102	Adg87102 Glucoamyl
330	1263	100.0	1218	2	AAW70539	Aaw70539 Integrin
331	1263	100.0	1218	6	ABU04027	Abu04027 Human exp
332	1263	100.0	1232	8	ADE45189	Ade45189 Human CD1
333	1263	100.0	1367	2	AAW70542	Aaw70542 Integrin
334	1263	100.0	1367	6	ABU03615	Abu03615 Human exp

ALIGNMENTS

RESULT 1
AAW26232
ID AAW26232 standard; protein; 232 AA.
XX
AC AAW26232;
XX
DT 16-MAR-1998 (first entry)
XX
DE Human IgG1 hinge/Fc region.
XX
KW Fusion protein; hydrophilic spacer; recombinant; expression system;
KW carboxypeptidase; IgG1; immunoglobulin; hinge region; Fc.
XX
OS Homo sapiens.
XX
PN WO9728272-A1.
XX
PD 07-AUG-1997.
XX
PF 31-JAN-1997; 97WO-US001470.
XX
PR 31-JAN-1996; 96US-00595043.
XX
PA (TECH-) TECHNOLOGENE INC.
XX
PI Sgarlato GD;
XX
DR WPI; 1997-402624/37.
DR N-PSDB; AAT80158.
XX
PT Recombinant protein expression system for fusion protein production -
PT useful for high quantity production of authentic recombinant proteins.
XX
PS Example 3; Page 133-134; 194pp; English.
XX
CC A novel recombinant vector has been developed which comprises a
CC nucleotide sequence encoding a fusion protein. The fusion protein
CC comprises three domains joined together in order, from N-terminus to C-
CC terminus, of a first domain comprising a protein of interest, a second
CC domain comprising a hydrophilic spacer and an affinity domain, each
CC domain comprising amino acid residues. The present sequence represents
CC the hinge/Fc region of human IgG1, used in example 3 of the present
CC invention. The recombinant vector is used for the production of authentic
CC recombinant proteins of interest. The method of the invention is useful
CC for the expression of fusion proteins capable of isolation by affinity
CC chromatography in pro- or eukaryotic cells. This method allows for the
CC efficient cleavage and generation of authentic proteins of interest that
CC do not contain extraneous (i.e. non-naturally occurring) amino acids
XX
SQ Sequence 232 AA;

```
  Query Match             100.0%;  Score 1263;  DB 2;  Length 232;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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RESULT 2
AAB28690
ID AAB28690 standard; protein; 232 AA.
XX
AC AAB28690;
XX
DT 14-FEB-2001 (first entry)
XX
DE Human IgGgamma1 hinge, CH2 and CH3 regions.
XX
KW Human; AGP-1; type II transmembrane protein; cytostatic; antiviral;
KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;
KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;
KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;
KW transplant rejection; cardiovascular disease; arteriosclerosis;
KW IgGgamma1.
XX
OS Homo sapiens.
XX
PN WO200063253-A1.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008004.
XX
PR 16-APR-1999; 99US-00293245.
XX
PA (AMGE-) AMGEN INC.
XX
PI Hsu H, Meng S;
XX
DR WPI; 2000-665240/64.
XX
PT Fusion protein of AGP-1 protein and an Fc region, used to treat
PT proliferative disorders, immune disorders, and virally-induced disorders.
XX
PS Claim 2; Fig 1; 93pp; English.
XX
CC The present sequence was used in the production of AGP-1 fusion proteins.
CC AGP-1 is a type II transmembrane protein. The fusion proteins comprise an
CC Fc immunoglobulin region fused to the N-terminal portion of the AGP-1
CC protein. The fusion proteins can be used to induce apoptosis in a tissue,
CC and to treat proliferative disorders, immune disorders, or virally-
CC induced disorders. The proliferative disorders include cancers, such as
CC breast, prostate, lung or colon cancer. The viral infections include
CC hepatitis, and acquired immunodeficiency syndrome (AIDS), and the immune
CC disorders may be autoimmune disorders or transplant rejection.
CC Cardiovascular diseases such as arteriosclerosis may also be treated. The
CC AGP-1 containing fusion proteins have increased biological activity
CC compared to the soluble AGP-1 proteins used in prior art therapies
XX
SQ Sequence 232 AA;

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  Query Match             100.0%;  Score 1263;  DB 3;  Length 232;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
```

RESULT 3
AAB80897
ID AAB80897 standard; protein; 232 AA.
XX
AC AAB80897;
XX
DT 31-MAY-2001 (first entry)
XX
DE Human IgGgamma1 hinge, CH2 and CH3 regions.
XX
KW Human; IgGgamma1; anticancer; Antimetastatic; Osteogenic;
KW lytic bone disease; multiple myeloma; immunoglobulin;
KW osteosclerotic bone metastasis; OPG; osteoprotegrin;
KW osteoclast formation inhibition; bone resorption inhibition.
XX
OS Homo sapiens.
XX
PN WO200117543-A2.
XX
PD 15-MAR-2001.
XX
PF 18-AUG-2000; 2000WO-US022806.
XX
PR 03-SEP-1999; 99US-00389545.
XX
PA (AMGE-) AMGEN INC.
XX
PI Dunstan CR;
XX
DR WPI; 2001-265936/27.
XX
PT Preventing or treating lytic bone diseases, particularly associated with
PT cancer or metastasis, by administering an osteoprotegrin polypeptide.
XX
PS Disclosure; Fig 1; 87pp; English.
XX
CC The present invention relates to a method for the prevention or treatment
CC of lytic bone disease or multiple myeloma. Also the method can be used
CC for preventing metastasis of cancer to bone or osteosclerotic bone
CC metastasis. The method comprises administering an OPG (osteoprotegrin)
CC polypeptide or OPG fusion protein. The OPG proteins (see AAB80898-
CC AAB80905) can inhibit formation of osteoclasts (and thus bone resorption)
CC by blocking differentiation from monocytes/macrophage precursors. The
CC present sequence is the hinge, CH2 and CH3 regions of human IgGgamma1.
CC This sequence can be used to generate fusion proteins of OPG and
CC immunoglobulin, for use in the present invention. The generated fusion
CC proteins can exhibit increased circulating half-lives and slower
CC clearance times, thereby providing a more sustained activity
XX
SQ Sequence 232 AA;

```
  Query Match           100.0%;  Score 1263;  DB 4;  Length 232;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
```

RESULT 4
AAY72915
ID AAY72915 standard; protein; 232 AA.
XX
AC AAY72915;
XX
DT 13-JUN-2001 (first entry)
XX
DE Human partial IgG1 protein comprising hinge, CH2 and CH3 regions.
XX
KW Human; fusion protein; osteoprotegerin; OPG; Fc protein; osteopathic;
KW therapy; bone loss; osteoporosis; Paget's disease; osteomyelitis;
KW hypercalcaemia; osteopenia; osteonecrosis; rheumatoid arthritis;
KW osteolytic metastasis; prosthetic loosening; immunoglobulin G1; IgG1;
KW periodontal.
XX
OS Homo sapiens.
XX
PN WO200118203-A1.
XX
PD 15-MAR-2001.
XX
PF 18-AUG-2000; 2000WO-US022797.
XX
PR 03-SEP-1999; 99US-00389782.
XX
PA (AMGE-) AMGEN INC.
XX
PI Dunstan CR, Wooden SK, Mann MB;
XX
DR WPI; 2001-244572/25.
XX
PT Osteoprotegerin-Fc protein fusions useful for treating bone loss caused
PT by e.g. osteoporosis, Paget's disease and osteomyelitis.
XX
PS Claim 3; Fig 1; 119pp; English.
XX
CC The patent discloses fusion protein comprising human osteoprotegerin
CC (OPG) protein fused by linker to human IgG1 Fc portion. OPG negatively
CC regulates formation of osteoclasts in vitro and in vivo. It blocks the
CC differentiation of osteoclasts from monocyte or macrophage precursors and
CC the reabsorption of bone. The OPG-Fc fusion protein is administered for
CC the treatment of bone loss resulting from osteoporosis, Paget's disease,
CC osteomyelitis, hypercalcaemia, osteopenia associated with surgery or
CC steroid administration, osteonecrosis, bone loss due to rheumatoid
CC arthritis, periodontal bone loss, osteolytic metastasis and/or prosthetic
CC loosening. The present sequence is partial human immunoglobulin G (Ig G)
CC 1 protein comprising the hinge and heavy chain constant regions CH2 and
CC CH3
XX
SQ Sequence 232 AA;

```
  Query Match           100.0%;  Score 1263;  DB 4;  Length 232;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
```

RESULT 5
AAE15347
ID AAE15347 standard; protein; 232 AA.
XX
AC AAE15347;
XX
DT 09-APR-2002 (first entry)
XX
DE Human immunoglobulin G (IgG) gamma 1 constant heavy chain hinge region.
XX
KW Human; erythropoietin; Epo; haematocrit; anaemia; kidney function; IgG;
KW cancer; myelosuppressive therapy; anti-viral drug; immunoglobulin G.
XX
OS Homo sapiens.
XX
PN WO200181405-A2.
XX
PD 01-NOV-2001.
XX
PF 19-APR-2001; 2001WO-US012836.
XX
PR 21-APR-2000; 2000US-00559001.
XX
PA (AMGE-) AMGEN INC.
XX
PI Egrie JC, Elliott SG, Browne JK, Sitney KC;
XX
DR WPI; 2002-034433/04.
XX
PT Increasing and maintaining hematocrit in mammal suffering from anemia,
PT comprising administering hyperglycosylated analog of erythropoietin less
PT frequently and at lower molar amount of recombinant human erythropoietin.
XX
PS Example 1; Fig 10; 95pp; English.
XX
CC The invention relates to a method for increasing and maintaining
CC haematocrit in a mammal. The method comprises administering a
CC hyperglycosylated analogue of erythropoietin (Epo) in a pharmaceutical
CC composition, less frequently than an equivalent molar amount of and at a
CC lower molar amount than recombinant human Epo (rHuEpo) to obtain a
CC comparable target haematocrit. Epo is a glycoprotein hormone necessary
CC for the maturation of erythroid progenitor cells into erythrocytes. Human
CC Epo analogue is useful for raising and maintaining haematocrit to a
CC comparable target haematocrit in a mammal suffering from anaemia
CC associated with a decline or loss of kidney function, myelosuppressive
CC therapy comprising chemotherapeutic or anti-viral drugs or associated
CC with excessive blood loss during surgical procedures, and in cancer
CC condition. The present sequence is human immunoglobulin G (IgG) gamma 1
CC constant heavy chain (CH2, CH3) hinge region used to construct Epo
CC hyperglycosylated analogue fusion protein
XX
SQ Sequence 232 AA;

```
  Query Match           100.0%;  Score 1263;  DB 5;  Length 232;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
```

RESULT 6
AAE26272
ID AAE26272 standard; protein; 232 AA.
XX
AC AAE26272;
XX
DT 14-NOV-2002 (first entry)
XX
DE Human IgG1 heavy chain.
XX
KW Human; amyloidogenic protein; Alzheimer's disease; Huntington's disease;
KW spongiform encephalopathy; familial amyloid cardiomyopathy; amyloidosis;
KW Gerstmann-Straussler-Scheinker syndrome; spongiform encephalopathy; GSS;
KW Creutzfeldt-Jacob disease; insulinoma; diabetes; body myocytis; myeloma;
KW CJ.
XX
OS Homo sapiens.
XX
PN WO200242462-A2.
XX
PD 30-MAY-2002.
XX
PF 27-NOV-2001; 2001WO-US044581.
XX
PR 27-NOV-2000; 2000US-0253302P.
PR 29-NOV-2000; 2000US-0250198P.
PR 20-DEC-2000; 2000US-0257186P.
XX
PA (PRAE-) PRAECIS PHARM INC.
XX
PI Gefter ML, Israel DI, Joyal JL, Gosselin M;
XX
DR WPI; 2002-636427/68.
XX
PT Novel therapeutic agent useful for treating an amyloidogenic disorder,
PT e.g. Alzheimer's disease, comprises an immunoglobulin heavy chain
PT constant region linked to a peptide capable of binding amyloidogenic
PT protein.
XX
PS Example 8; Page 76; 79pp; English.
XX
CC The invention relates to a compound comprising an immunoglobulin (Ig)
CC heavy chain constant region or its fragment that retains the ability to
CC bind an Fc receptor linked by a linker group or a direct bond to a
CC peptide capable of binding an amyloidogenic protein. The invention is
CC useful for clearing an amyloidogenic protein such as beta-amyloid,
CC transthyretin (TTR), prion protein (PrP), islet amyloid polypeptide
CC (IAPP), atrial natriuretic factor (ANF), kappa light chain, lambda light
CC chain, amyloid A, procalcitonin, cystatin C, beta2-microglobulin, ApoA-I,
CC gelsolin, calcitonin, fibrinogen, Huntington, alpha-synuclein and
CC lysozyme from a subject and for treating an amyloidogenic disorder such
CC as Alzheimer's disease and spongiform encephalopathy. Disorders treatable
CC include those caused or characterised by deposits of TTR (eg. familial
CC amyloid cardiomyopathy), PrP (eg. spongiform encephalopathies, including
CC scrapie in sheep, bovine spongiform encephalopathy in cows and
CC Creutzfeldt-Jacob disease (CJ) and Gerstmann-Straussler-Scheinker
CC syndrome (GSS) in humans), IAPP (eg. insulinoma, adult onset diabetes),
CC ANF (eg. isolated atrial amyloid), kappa or lambda light chain (eg.
CC idiopathic amyloidosis, myeloma), amyloid A (eg. amyloidosis), Apo A-I
CC (eg. hereditary non-neuropathic systemic amyloidosis), Gelsolin (eg.
CC familial amyloidosis of Finnish type), Fibrinogen (eg. hereditary renal
CC amyloidosis), Lysozyme (eg. hereditary systemic amyloidosis). Other
CC examples of amyloidogenic disorders include Huntington's disease and
CC inclusion body myocytis. The present sequence is human IgG1 heavy chain,
CC used in the exemplification of the invention
XX
SQ Sequence 232 AA;

```
  Query Match           100.0%;  Score 1263;  DB 5;  Length 232;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
```

RESULT 7
ADJ65991
ID ADJ65991 standard; protein; 232 AA.
XX
AC ADJ65991;
XX
DT 06-MAY-2004 (first entry)
XX
DE Herpes virus entry mediator-related protein #2.
XX
KW therapeutic agent; endotoxin induced disease; fusion protein;
KW Herpes virus entry mediator; HVEM; immunoglobulin Fc domain;
KW endotoxic shock; human.
XX
OS Homo sapiens.
XX
PN JP2003128576-A.
XX
PD 08-MAY-2003.
XX
PF 25-OCT-2001; 2001JP-00328430.
XX
PR 25-OCT-2001; 2001JP-00328430.
XX
PA (TAIS) TAISHO PHARM CO LTD.
PA (GENE-) GENE TECHNO SCI KK.
XX
DR WPI; 2003-817833/77.
DR N-PSDB; ADJ65998.
XX
PT New therapeutic agent, useful for treating endotoxin induced disease,
PT comprises fusion protein of Herpes virus entry mediator protein and
PT immunoglobulin.
XX
PS Claim 5; SEQ ID NO 2; 11pp; Japanese.

```
XX
CC   The invention comprises a therapeutic agent for treating endotoxin
CC   induced disease, the therapeutic agent contains a fusion protein of the
CC   Herpes virus entry mediator (HVEM) protein and an immunoglobulin Fc
CC   domain. The therapeutic agent of the invention is useful for treating
CC   endotoxin induced disease, such as endotoxic shock. The present amino
CC   acid sequence represents a human protein which is claimed in the
CC   specification.
XX
SQ   Sequence 232 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 232;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232


RESULT 8
ADJ57512
ID   ADJ57512 standard; protein; 232 AA.
XX
AC   ADJ57512;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human IgG1 Fc domain fragment.
XX
KW   TF; tissue factor; FVIIa; factor VII; anticoagulant; thrombolytic;
KW   cerebroprotective; cytostatic; vasotropic; antirheumatic; antiarthritic;
KW   antiarteriosclerotic; antiinflammatory; antibacterial; immunosuppressive;
KW   hypertensive; cardiant; coagulation Factor VII; human; immunoglobulin G1;
KW   IgG1.
XX
OS   Homo sapiens.
XX
PN   WO2004006962-A2.
XX
PD   22-JAN-2004.
XX
PF   09-JUL-2003; 2003WO-DK000481.
XX
PR   12-JUL-2002; 2002DK-00001099.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Bjorn SE,  Nicolaisen EM,  Steenstrup TD;
XX
DR   WPI; 2004-180224/17.
XX
PT   New compound binding to tissue factor, useful for treating diseases such
PT   as angiogenesis, ischemia/reperfusion, and rheumatoid arthritis.
XX
PS   Claim 16; SEQ ID NO 7; 61pp; English.
XX
CC   The invention relates to a compound (I) binding to tissue factor (TF).
CC   The compound (I) has the formula A-(LM)-C, where A is a FVIIa
CC   polypeptide, LM is an optional linker group, C comprises an
CC   immunostimulatory effector domain, and (I) binds to TF. (I) inhibits TF-
CC   mediated activated factor VII (FVIIa) activity. (I) is useful as a
CC   medicament, and for the manufacture of a medicament for preventing or
CC   treating disease or disorder associated with pathophysiological TF
CC   activity. The disease or disorder associated with pathophysiological TF
CC   activity are deep venous thrombosis, arterial thrombosis, post surgical
CC   thrombosis, coronary artery bypass graft (CABG), percutaneous transdermal
CC   coronary angioplastry (PTCA), stroke, cancer, tumor metastasis,
CC   angiogenesis, ischemia/reperfusion, rheumatoid arthritis, thrombolysis,
CC   arteriosclerosis and restenosis following angioplastry, acute and chronic
CC   indications such as inflammation, septic shock, septicemia, hypotension,
CC   adult respiratory distress syndrome (ARDS), disseminated intravascular
CC   coagulopathy (DIC), pulmonary embolism, platelet deposition, myocardial
CC   infarction, or prophylactic treatment of mammals with atherosclerotic
CC   vessels at risk for thrombosis. The present sequence represents the Fc
CC   domain fragment of human immunoglobulin G1 (IgG1).
XX
SQ   Sequence 232 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 232;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232


RESULT 9
ADR48992
ID   ADR48992 standard; peptide; 232 AA.
XX
AC   ADR48992;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Human IgG1 hinge and CH2 region.
XX
KW   antianaemic; nephrotropic; human; HuEPO-L-vFc; erythropoietin; EPO;
KW   anaemia; renal disease; cancer chemotherapy; rheumatoid arthritis;
KW   AZT treatment; HIV infection; myelodysplastic syndrome; renal failure.
XX
OS   Homo sapiens.
XX
PN   US2004175824-A1.
XX
PD   09-SEP-2004.
XX
PF   21-JAN-2004; 2004US-00761593.
XX
PR   17-AUG-2001; 2001US-00932812.
XX
PA   (SUNL/) SUN L K.
PA   (SUNB/) SUN B N C.
PA   (SUNC/) SUN C R Y.
XX
PI   Sun LK,  Sun BNC,  Sun CRY;
XX
DR   WPI; 2004-634851/61.
XX
PT   New recombinant HuEPO-L-vFc fusion protein comprises human erythropoietin
PT   (HuEPO), a peptide linker, and a human IgG Fc variant, useful for
```

```
PT   treating chronic anemia due to renal diseases, cancer chemotherapy, or
PT   rheumatoid arthritis.
XX
PS   Disclosure; SEQ ID NO 26; 31pp; English.
XX
CC   A recombinant HuEPO-L-vFc fusion protein comprises human erythropoietin
CC   (HuEPO), a peptide linker, and a human IgG Fc variant, is new.
CC   INDEPENDENT CLAIMS are also included for the following: a chinese hamster
CC   ovary (CHO)-derived cell line producing the HuEPO-L-vFc fusion protein in
CC   its growth medium in excess of 10 &micro;g per million cells in a 24 hour
CC   period; and a method for making a recombinant fusion protein comprising
CC   HuEPO, a flexible peptide linker, and a human IgG Fc variant. Preferred
CC   Protein: The peptide linker containing 20 or fewer amino acids is present
CC   between HuEPO and the human IgG Fc variant, and comprises two or more
CC   amino acids selected from glycine, serine, alanine, and threonine. The
CC   human IgG Fc variant comprises a hinge, CH2, and CH3 domains of human
CC   IgG2 with Pro331Ser mutation comprising 436 amino acids (SEQ ID NO. 18).
CC   It also comprises a hinge, CH2, and CH3 domains of human IgG4 with
CC   Ser228Pro and Leu235Ala mutations comprising 437 amino acids (SEQ ID NO.
CC   20). It further comprises a hinge, CH2, and CH3 domains of human IgB1
CC   with Leu234Val, Leu235Ala, and Pro331Ser mutations comprising 435 amino
CC   acids (SEQ ID NO. 22). The HuEPO-L-vFc fusion protein exhibits in vitro
CC   biological activity similar to or higher than that of rHuEPO on a molar
CC   basis. Preferred CHO-Derived Cell Line: The CHO-derived cell line
CC   producing the HuEPO-L-vFc fusion protein in its growth medium in excess
CC   of 30 &micro;g per million cells in a 24 hour period. The human IgG Fc
CC   variant comprises a hinge, CH2, CH3 domains of human IgG selected from
CC   IgB1 as SEQ ID NO. 22, IgG2 as SEQ ID NO. 18, and IgG4 as SEQ ID NO. 20,
CC   the IgG Fc contains amino acid mutations to attenuate effector functions,
CC   a flexible peptide linker containing 20 or fewer amino acids is present
CC   between HuEPO and human IgG Fc variant, and the HuEPO-L-vFc fusion
CC   protein exhibits in vitro biological activity similar to or higher than
CC   that of rHuEPO on a molar basis. Preferred Method: Making a recombinant
CC   fusion protein comprising HuEPO, a flexible peptide linker, and a human
CC   IgG Fc variant comprises: generating a CHO-derived cell line; growing the
CC   cell line where the recombinant protein is expressed in its growth medium
CC   in excess of 10 &micro;g per million cells in a 24 hour period; and
CC   purifying the expressed protein from (b), where the recombinant fusion
CC   protein exhibits in vitro biological activity similar to or higher than
CC   that of rHuEPO on a molar basis. Antianemic; Nephrotropic. No biological
CC   data given. None given. Administration can be through subcutaneous or
CC   intravenous route. No dosage given. The recombinant HuEPO-L-vFc fusion
CC   protein is useful for treating patients with chronic anemia due to renal
CC   diseases, cancer chemotherapy, rheumatoid arthritis, AZT treatment for
CC   HIV infection, or myelodysplastic syndrome. It is also useful in the
CC   treatment of renal failure. A fusion protein was assembled from several
CC   DNA segments. To obtain the gene encoding the leader peptide and mature
CC   protein of human erythropoietin (EPO), cDNA library of human fetal liver
CC   or kidney was used as the template in polymerase chain reaction (PCR).
CC   For the convenience of cloning, SEQ ID NO. 1 which incorporates a
CC   restriction enzyme cleavage site is used as the 5' oligonucleotide
CC   primer. The 3' primer (SEQ ID NO. 2) eliminates the EPO termination codon
CC   and incorporates a BamHI site. The resulting DNA fragments of
CC   approximately 600 bp were inserted into a holding vector such as pUC19 at
CC   the HindIII and BamHI sites to give the pEPO plasmid. The sequence of the
CC   human EPO gene was confirmed by DNA sequencing.
XX
SQ   Sequence 232 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 232;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232


RESULT 10
ABB09463
ID   ABB09463 standard; protein; 233 AA.
XX
AC   ABB09463;
XX
DT   01-JUL-2002  (first entry)
XX
DE   Human IgG Fc fragment amino acid sequence.
XX
KW   Protein A; immunoglobin G; IgG; antibody; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 168
FT                   /note= "encoded by GAC"
FT   Misc-difference 169
FT                   /note= "encoded by ACC"
XX
PN   WO200204602-A1.
XX
PD   17-JAN-2002.
XX
PF   04-JUL-2001; 2001WO-JP005788.
XX
PR   07-JUL-2000; 2000JP-00206689.
XX
PA   (GENC-) GENCOM CORP.
XX
PI   Tanaka A,  Ueda M,  Teranishi Y;
XX
DR   WPI; 2002-148174/19.
DR   N-PSDB; ABL52834.
XX
PT   Transformant yeast for stable supply of highly active catalytic antibody,
PT   comprises the capability of expressing and presenting protein A or its
PT   fragment, particularly with the ZZ domain, on the cell surface.
XX
PS   Example 3; Fig 4; 25pp; Japanese.
XX
CC   The invention relates to a transformant yeast that can present protein A
CC   or its fragment on its cell surface. The yeast can be used for detecting
CC   or isolating the Fc part of immunoglobulin (Ig)G. The yeast is useful for
CC   a stable supply of highly active catalytic antibody e.g. by screening
CC   novel functional molecules and in isolating Fc-carrying secretory
CC   proteins. The yeast of the invention is capable of adhering specifically
CC   to a combinatorial antibody library with an Fc-carrying antibody
CC   component. The current sequence represents the human IgG Fc fragment
CC   amino acid sequence
XX
SQ   Sequence 233 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 233;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          2 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 61

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 121

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
```

```
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 181

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 233


RESULT 11
ABJ38647
ID   ABJ38647 standard; protein; 235 AA.
XX
AC   ABJ38647;
XX
DT   26-JUN-2003  (first entry)
XX
DE   pCXFc protein SEQ ID No 6.
XX
KW   Cytostatic; osteopathic; cerebroprotective; dermatological; enzyme;
KW   antigen binding; receptor protein tyrosine kinase; skeletal dysplasia;
KW   constitutive activation; craniosynostosis; cell proliferative disorder;
KW   achondroplasia; thanatophoric dysplasia; acanthosis nigricans dysplasia;
KW   hypochondroplasia; severe achondroplasia; transitional cell carcinoma;
KW   Muenke coronal craniosynostosis; Crouzin syndrome; acanthosis nigricans;
KW   tumour progression; osteosarcoma; chondrosarcoma; multiple myeloma;
KW   mammary carcinoma; fibroblast growth factor receptor 3; FGFR3 protein.
XX
OS   Homo sapiens.
XX
PN   WO2002102854-A2.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2002; 2002WO-IB003523.
XX
PR   20-JUN-2001; 2001US-0299187P.
XX
PA   (MORP-) MORPHOSYS AG.
PA   (PROC-) PROCHON BIOTECH LTD.
XX
PI   Thomassen-Wolf E,  Borges E,  Yayon A,  Rom E;
XX
DR   WPI; 2003-167489/16.
DR   N-PSDB; ABT40262.
XX
PT   New molecules having the antigen-binding portion of antibodies that block
PT   activation of receptor protein tyrosine kinase, useful for treating or
PT   inhibiting skeletal dysplasias, craniosynostosis or cell proliferative
PT   disorders.
XX
PS   Example 2; Page 38; 103pp; English.
XX
CC   The invention relates to a novel molecule comprising the antigen binding
CC   portion of an isolated antibody, which has an increased affinity for a
CC   receptor protein tyrosine kinase and which blocks constitutive activation
CC   of the receptor protein tyrosine kinase. The methods and compositions of
CC   the invention are useful for treating or inhibiting a skeletal dysplasia,
CC   craniosynostosis or a cell proliferative disorder. The skeletal dysplasia
CC   is achondroplasia, thanatophoric dysplasia, hypochondroplasia, severe
CC   achondroplasia with developmental delay or acanthosis nigricans
CC   dysplasia. The craniosynostosis disorder is Muenke coronal
CC   craniosynostosis or Crouzin syndrome with acanthosis nigricans. The cell
CC   proliferative disorder is tumour progression that is progression of
CC   transitional cell carcinoma, osteosarcoma, chondrosarcoma, multiple
CC   myeloma or mammary carcinoma. This sequence represents a protein derived
CC   from a pCXFc plasmid DNA vector relating to the protein tyrosine kinase
CC   inhibitor of the invention
XX
SQ   Sequence 235 AA;

  Query Match           100.0%;  Score 1263;  DB 6;  Length 235;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          4 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 63

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         64 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 123

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        124 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 183

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        184 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 235


RESULT 12
ADA89055
ID   ADA89055 standard; protein; 235 AA.
XX
AC   ADA89055;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Plasmid pCXFc amino acid sequence SEQ ID NO:6.
XX
KW   antigen binding; antibody; specific binding affinity;
KW   receptor protein tyrosine kinase; RPTK;
KW   receptor protein tyrosine kinase inhibitor;
KW   fibroblast growth factor receptor; FGFR; osteopathic; cytostatic;
KW   ophthalmological; bone disorder; cartilage disorder; skeletal disorder;
KW   skeletal dysplasia; achondroplasia; thanatophoric dysplasia;
KW   hypochondroplasia; craniosynostosis disorder;
KW   malignant cell proliferative disease; cancer; tumour; vision disorder;
KW   non-neoplastic angiogenic pathologic condition.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO2002102973-A2.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2002; 2002WO-IL000495.
XX
PR   20-JUN-2001; 2001US-0299187P.
XX
PA   (PROC-) PROCHON BIOTECH LTD.
XX
PI   Yayon A,  Rom E;
XX
DR   WPI; 2003-175236/17.
DR   N-PSDB; ADA89054.
XX
PT   New antibodies which have specific binding affinity for a receptor
PT   protein tyrosine kinase (RPTK) and block constitutive activation of RPTK,
PT   useful for treating bone and cartilage disorders, or malignant cell
PT   proliferative diseases.
XX
PS   Example 2; Page 43; 122pp; English.
XX
CC   The present invention describes a molecule (I) comprising the antigen
CC   binding portion of an isolated antibody which has specific binding
CC   affinity for a receptor protein tyrosine kinase (RPTK), particularly for
CC   a fibroblast growth factor receptor (FGFR), and which blocks constitutive
CC   activation of an RPTK. Also described: (1) pharmaceutical compositions
CC   comprising (I) as an active ingredient and a pharmaceutical carrier,
CC   excipient, or auxiliary agent; (2) a kit comprising (I), at least one
CC   reagent for detecting the presence of (I) when bound to the RPTK, and
CC   instructions for use; (3) a method for treatment of bone and cartilage
CC   related disorders by administering a composition of (1) to the subject;
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CC   (4) a method for treating or inhibiting a cell proliferative disease or
CC   disorder by administering the composition of (1); (5) a method for
CC   screening a molecule comprising the antigen-binding portion of an
CC   antibody which blocks ligand-dependent activation of RPTK; (6) an
CC   isolated nucleic acid molecule encoding a VL-CDR3 DNA region and a VH-
CC   CDR3 DNA region; (7) an isolated nucleic acid molecule encoding VL region
CC   and a VH region; (8) vectors comprising a nucleic acid molecule of (6) or
CC   (7); and (9) host cells transformed with the vector. (I) have
CC   osteopathic, cytostatic and ophthalmological activities, and can be used
CC   as a RPTK inhibitor. Compositions comprising (I) are useful for treating
CC   bone and cartilage disorders, including skeletal disorders such as
CC   skeletal dysplasia (achondroplasia, thanatophoric dysplasia,
CC   hypochondroplasia, severe achondroplasia with developmental delay and
CC   acanthosis nigricans dysplasia) or a craniosynostosis disorder (e.g.
CC   Muenke coronal craniosynostosis or Crouzon syndrome with acanthosis
CC   nigricans). The composition may also be used for treating or inhibiting
CC   malignant cell proliferative disease or disorder associated with abnormal
CC   RPTK activity, including a haematopoietic malignancy (e.g. multiple
CC   myeloma), solid tumours (e.g. mammary, colon, cervical, bladder,
CC   colorectal, chondrosarcoma or osteosarcoma), tumour formation, primary
CC   tumours, tumour progression (particularly progression of transitional
CC   cell carcinoma or mammary carcinoma), or tumour metastasis, where the
CC   cell proliferative disorder may be associated with the action of a
CC   constitutively activated RPTK, or with ligand-dependent activation of
CC   RPTK. The compositions may further be used for treating
CC   hyperproliferative diseases and disorders associated with ligand-
CC   dependent FGFR signaling, such as vision disorders (e.g. neovascular
CC   glaucoma, macular degeneration and proliferative retinopathy including
CC   diabetic retinopathy), and non-neoplastic angiogenic pathologic
CC   conditions (e.g. haemangiomas, angiofibromas and psoriasis). The present
CC   sequence is given in the exemplification of the present invention.
XX
SQ   Sequence 235 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 235;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          4 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 63

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         64 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 123

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        124 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 183

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        184 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 235


RESULT 13
ADD25647
ID   ADD25647 standard; protein; 235 AA.
XX
AC   ADD25647;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Binding domain-immunoglobulin fusion protein-associated protein #101.
XX
KW   Binding domain; immunoglobulin; fusion protein; cytostatic;
KW   antiarthritic; immunosuppressive; antidiabetic; antithyroid;
KW   neuroprotective; hinge region; immunoglobulin heavy chain;
KW   CH2 constant region; CH3 constant region; IgG1;
KW   antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;
KW   malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;
KW   rheumatoid arthritis; myasthenia gravis; Grave's disease;
KW   type I diabetes mellitus; multiple sclerosis; autoimmune disease.
XX
OS   Unidentified.
XX
PN   US2003118592-A1.
XX
PD   26-JUN-2003.
XX
PF   25-JUL-2002; 2002US-00207655.
XX
PR   17-JAN-2001; 2001US-0367358P.
PR   17-JAN-2002; 2002US-00053530.
PR   03-JUN-2002; 2002US-0385691P.
XX
PA   (GENE-) GENECRAFT INC.
XX
PI   Ledbetter JA,  Hayden-Ledbetter MS,  Thompson PA;
XX
DR   WPI; 2003-801317/75.
XX
PT   New binding domain-immunoglobulin fusion protein, useful for treating a
PT   subject having or suspected of having a malignant condition or a B-cell
PT   disorder, e.g. melanoma, Grave's disease or autoimmune disease.
XX
PS   Disclosure; SEQ ID NO 208; 157pp; English.
XX
CC   The invention relates to a binding domain-immunoglobulin fusion protein
CC   comprising a binding domain polypeptide that is fused to an
CC   immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain
CC   CH2 constant region polypeptide that is fused to the hinge region
CC   polypeptide, and an immunoglobulin heavy chain CH3 constant region
CC   polypeptide that is fused to the CH2 constant region polypeptide. The
CC   hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin
CC   hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge
CC   region polypeptide, derived from (a) having 3 or more cysteine residues;
CC   where the mutated human IgG1 immunoglobulin hinge region polypeptide
CC   contains 2 cysteine residues, where the first cysteine is not mutated; a
CC   mutated human IgG1 immunoglobulin hinge region polypeptide, derived from
CC   (a) having 3 or more cysteine residues, where the mutated human IgG1
CC   immunoglobulin hinge region polypeptide contains no more than one
CC   cysteine residue; and a mutated human IgG1 immunoglobulin hinge region
CC   polypeptide, derived from (a) having 3 or more cysteine residues; where
CC   the mutated human IgG1 immunoglobulin hinge region polypeptide contains
CC   no cysteine residues. The binding domain-immunoglobulin fusion protein is
CC   capable of at least one immunological activity comprising antibody
CC   dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The
CC   binding domain polypeptide is capable of specifically binding to an
CC   antigen. Also included are an isolated polynucleotide encoding the
CC   binding domain-immunoglobulin fusion protein, a recombinant expression
CC   construct comprising the polynucleotide (operably linked to a promoter),
CC   a host cell transformed or transfected with a recombinant expression
CC   construct, producing the binding domain-immunoglobulin fusion protein, a
CC   pharmaceutical composition comprising the binding domain-immunoglobulin
CC   fusion protein or polynucleotide and a carrier, and treating a subject
CC   having or suspected of having a malignant condition or a B-cell disorder.
CC   The binding domain-immunoglobulin fusion protein is useful for treating a
CC   subject having or suspected of having a malignant condition or a B-cell
CC   disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,
CC   myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple
CC   sclerosis or autoimmune disease. The present sequence is a binding domain
CC   -immunoglobulin fusion protein-associated protein sequence. Note: The
CC   sequence data for this patent formed part of the printed specification
CC   and is also available in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030118592. The authors have not
CC   identified the sequences in the printed specification by their SEQ ID
CC   number therefore none of the sequences can be explicitly identified.
XX
SQ   Sequence 235 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 235;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
```

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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          4 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 63

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         64 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 123

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        124 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 183

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 |||||||||||||||||||||||||||||||||||||||||||||||||||
Db        184 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 235
```

RESULT 14
ADG74307
ID ADG74307 standard; protein; 235 AA.
XX
AC ADG74307;
XX
DT 11-MAR-2004 (first entry)
XX
DE Fibroblast growth factor receptor 3 (FGFR3) extracellular domain protein.
XX
KW antigen binding; receptor protein tyrosine kinase;
KW fibroblast growth factor receptor 3; FGFR3; osteopathic; cytostatic;
KW nootropic; neuroprotective; ophthalmological; antidiabetic; gene therapy;
KW bone; cartilage; craniosynostosis; skeletal dysplasia;
KW cell proliferative disorder; haematopoietic malignancy;
KW hyperproliferative disorder; neurovascular glaucoma;
KW macular degeneration; proliferative retinopathy; diabetic retinopathy.
XX
OS Unidentified.
XX
PN WO2002102972-A2.
XX
PD 27-DEC-2002.
XX
PF 20-JUN-2002; 2002WO-IL000494.
XX
PR 20-JUN-2001; 2001US-0299187P.
XX
PA (PROC-) PROCHON BIOTECH LTD.
PA (MORP-) MORPHOSYS AG.
XX
PI Yayon A, Rom E, Thomassen-Wolf E, Borges E;
XX
DR WPI; 2003-175235/17.
XX
PT New antigen binding portion of an antibody having a specific binding
PT affinity for a receptor protein tyrosine kinase, useful for treating bone
PT and cartilage related disorders, cell proliferative or hyperproliferative
PT disorders.
XX
PS Example 2; SEQ ID NO 6; 122pp; English.
XX
CC The invention relates to a novel molecule comprising the antigen binding
CC portion of an isolated antibody having a specific binding affinity for a
CC receptor protein tyrosine kinase, and which blocks constitutive
CC activation of a receptor protein tyrosine kinase, such as fibroblast
CC growth factor receptor 3 (FGFR3). The novel molecules of the invention
CC have the following activities: osteopathic, cytostatic, nootropic,
CC neuroprotective, ophthalmological, and antidiabetic. The nucleic acids
CC encoding the novel molecules of the invention can be used in gene therapy
CC to treat disorders. The molecule and nucleic acid molecules are useful
CC for treating bone and cartilage related disorders such as
CC craniosynostosis (e.g. Muenke coronal craniosynostosis or Crouzon
CC syndrome with acanthosis nigricans), or skeletal dysplasia (e.g.
CC achondroplasia, thanatophoric dysplasia (TD), hypochonroplasia, severe
CC achondroplasia with developmental delay and acanthosis nigricans (SADDAN)
CC dysplasia), cell proliferative disorders, haematopoietic malignancy (e.g.
CC multiple myeloma), hyperproliferative disorders, neurovascular glaucoma,
CC macular degeneration or proliferative retinopathy including diabetic
CC retinopathy. This sequence represents the protein of the fibroblast
CC growth factor receptor 3 (FGFR3) extracellular domain of the invention.
XX
SQ Sequence 235 AA;

```
  Query Match             100.0%;  Score 1263;  DB 7;  Length 235;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          4 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 63

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         64 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 123

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        124 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 183

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        184 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 235
```

RESULT 15
AAE26274
ID AAE26274 standard; protein; 247 AA.
XX
AC AAE26274;
XX
DT 14-NOV-2002 (first entry)
XX
DE Human beta amyloid-IgG1 Fc fusion protein.
XX
KW Human; amyloidogenic protein; Alzheimer's disease; Huntington's disease;
KW spongiform encephalopathy; familial amyloid cardiomyopathy; amyloidosis;
KW Gerstmann-Straussler-Scheinker syndrome; spongiform encephalopathy; GSS;
KW Creutzfeldt-Jacob disease; insulinoma; diabetes; body myocytis; myeloma;
KW CJ; beta amyloid; Fc region; chimeric.
XX
OS Homo sapiens.
XX
PN WO200242462-A2.
XX
PD 30-MAY-2002.
XX
PF 27-NOV-2001; 2001WO-US044581.
XX
PR 27-NOV-2000; 2000US-0253302P.
PR 29-NOV-2000; 2000US-0250198P.
PR 20-DEC-2000; 2000US-0257186P.
XX
PA (PRAE-) PRAECIS PHARM INC.
XX
PI Gefter ML, Israel DI, Joyal JL, Gosselin M;
XX
DR WPI; 2002-636427/68.
XX
PT Novel therapeutic agent useful for treating an amyloidogenic disorder,
PT e.g. Alzheimer's disease, comprises an immunoglobulin heavy chain
PT constant region linked to a peptide capable of binding amyloidogenic
PT protein.
XX
PS Example 10; Page 78-79; 79pp; English.
XX
CC The invention relates to a compound comprising an immunoglobulin (Ig)
CC heavy chain constant region or its fragment that retains the ability to
CC bind an Fc receptor linked by a linker group or a direct bond to a
CC peptide capable of binding an amyloidogenic protein. The invention is

```
CC   useful for clearing an amyloidogenic protein such as beta-amyloid,
CC   transthyretin (TTR), prion protein (PrP), islet amyloid polypeptide
CC   (IAPP), atrial natriuretic factor (ANF), kappa light chain, lambda light
CC   chain, amyloid A, procalcitonin, cystatin C, beta2-microglobulin, ApoA-I,
CC   gelsolin, calcitonin, fibrinogen, Huntington, alpha-synuclein and
CC   lysozyme from a subject and for treating an amyloidogenic disorder such
CC   as Alzheimer's disease and spongiform encephalopathy. Disorders treatable
CC   include those caused or characterised by deposits of TTR (eg. familial
CC   amyloid cardiomyopathy), PrP (eg. spongiform encephalopathies, including
CC   scrapie in sheep, bovine spongiform encephalopathy in cows and
CC   Creutzfeldt-Jacob disease (CJ) and Gerstmann-Straussler-Scheinker
CC   syndrome (GSS) in humans), IAPP (eg. insulinoma, adult onset diabetes),
CC   ANF (eg. isolated atrial amyloid), kappa or lambda light chain (eg.
CC   idiopathic amyloidosis, myeloma), amyloid A (eg. amyloidosis), Apo A-I
CC   (eg. hereditary non-neuropathic systemic amyloidosis), Gelsolin (eg.
CC   familial amyloidosis of Finnish type), Fibrinogen (eg. hereditary renal
CC   amyloidosis), Lysozyme (eg. hereditary systemic amyloidosis). Other
CC   examples of amyloidogenic disorders include Huntington's disease and
CC   inclusion body myocytis. The present sequence is human beta amyloid (16-
CC   30 amino acids)-IgG1 Fc region fusion protein
XX
SQ   Sequence 247 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 247;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         16 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 75

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         76 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 135

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        136 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 195

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        196 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 247


RESULT 16
ABB81490
ID   ABB81490 standard; protein; 251 AA.
XX
AC   ABB81490;
XX
DT   02-SEP-2002  (first entry)
XX
DE   Human immunoglobulin gamma1 constant region protein SEQ ID NO:18.
XX
KW   Human; Ztnfr12; tumour necrosis factor receptor; cytostatic;
KW   immunosuppressive; dermatological; antiinflammatory; antidiabetic;
KW   neuroprotective; antirheumatic; antiarthritic; antiasthmatic;
KW   nephrotropic; hypotensive; gene therapy; B lymphocyte; tumour;
KW   autoimmune disorder; systemic lupus erythematosus; myasthenia gravis;
KW   multiple sclerosis; insulin dependent diabetes mellitus; asthma;
KW   rheumatoid arthritis; bronchitis; emphysema; renal disease; lymphoma;
KW   glomerulonephritis; vasculitis; chronic lymphoid leukaemia; nephritis;
KW   pyelonephritis; renal neoplasm; multiple myeloma; amyloidosis;
KW   light chain neuropathy; hypertension; large vessel disease;
KW   graft-versus host disease; graft rejection; Crohn's disease.
XX
OS   Homo sapiens.
XX
PN   WO200238766-A2.
XX
PD   16-MAY-2002.
XX
PF   05-NOV-2001; 2001WO-US047018.
XX
PR   07-NOV-2000; 2000US-0246449P.
PR   20-DEC-2000; 2000US-0257131P.
PR   28-JUN-2001; 2001US-0301715P.
PR   29-AUG-2001; 2001US-0315565P.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Gross JA,  Xu W,  Henne RM,  Grant FJ;
XX
DR   WPI; 2002-508212/54.
DR   N-PSDB; ABN89435.
XX
PT   Novel isolated human tumor necrosis factor receptor polypeptide, termed
PT   Ztnfr 12, useful for treating autoimmune disorders, emphysema, end stage
PT   renal failure or renal disease and lymphoma.
XX
PS   Example 4; Page 143; 154pp; English.
XX
CC   The present invention describes a human tumour necrosis factor receptor
CC   designated Ztnfr12 (I). (I) has cytostatic, immunosuppressive,
CC   dermatological, antiinflammatory, neuroprotective, antidiabetic,
CC   antirheumatic, antiarthritic, antiasthmatic, nephrotropic and hypotensive
CC   activities, and can be used in gene therapy. (I) can be used for
CC   inhibiting, in a mammal, the activity of a ligand that binds Ztnfr12
CC   (e.g. ZTNF4), for treating disorders and diseases associated with B
CC   lymphocytes, activated B lymphocytes or resting B lymphocytes, and for
CC   inhibiting the proliferation of tumour cells. (I) is useful for treating
CC   autoimmune disorders such as systemic lupus erythematosus, myasthenia
CC   gravis, multiple sclerosis, insulin dependent diabetes mellitus, asthma,
CC   rheumatoid arthritis, bronchitis, emphysema and end stage renal failure
CC   or renal disease such as glomerulonephritis, vasculitis, chronic lymphoid
CC   leukaemia, nephritis, and pyelonephritis, and for treating renal
CC   neoplasms, multiple myelomas, lymphomas, light chain neuropathy, or
CC   amyloidosis, hypertension, large vessel diseases, graft-versus host
CC   disease, graft rejection and Crohn's disease. (I) is useful for
CC   modulating the immune system, for regulating B cell responses and
CC   development, for modulating development of other cells, antibody
CC   production and cytokine production, and for modulating T and B cell
CC   communication. Human Ztnfr12 is located to chromosome 22q13.2. The
CC   present sequence represents human immunoglobulin gamma1 constant region,
CC   which is used in an example from the present invention
XX
SQ   Sequence 251 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 251;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         20 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 79

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         80 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 139

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 199

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 251


RESULT 17
AAE35214
ID   AAE35214 standard; protein; 251 AA.
XX
AC   AAE35214;
XX
DT   28-MAY-2003  (first entry)
```

```
XX
DE   Human wild-type immunoglobulin gamma1 region.
XX
KW   Transmembrane activator; calcium modulator; nephrotropic; antibacterial;
KW   TACI; tumour necrosis factor-like protein; ZTNF2; ZTNF4; immunoglobulin;
KW   anaemia; gene therapy; cytostatic; antiinflammatory; immunosuppressive;
KW   glomerulonephritis; asthma; bronchitis; graft rejection; septic shock;
KW   dermatological; neuroprotective; cyclophilin ligand-interactor; human;
KW   autoimmune disease; systemic lupus erythematosus; multiple sclerosis;
KW   diabetes mellitus; rheumatoid arthritis; renal disease; inflammation.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Binding-site    38.. .41
FT                   /note= "FcgammaRI binding site"
XX
PN   WO200294852-A2.
XX
PD   28-NOV-2002.
XX
PF   20-MAY-2002; 2002WO-US015910.
XX
PR   24-MAY-2001; 2001US-0293343P.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Rixon MW,  Gross JA;
XX
DR   WPI; 2003-148455/14.
DR   N-PSDB; AAD53735.
XX
PT   Transmembrane activator and calcium modulator and cyclophilin ligand-
PT   interactor (TACI)-immunoglobulin fusion protein, for treating cancer or
PT   diabetes, comprises a TACI receptor group and an immunoglobulin group.
XX
PS   Example 1; Col 92-93; 71pp; English.
XX
CC   The invention relates to fusion proteins comprising transmembrane
CC   activator and calcium modulator and cyclophilin ligand-interactor (TACI)
CC   receptor group that binds tumour necrosis factor-like protein (ZTNF)2 or
CC   ZTNF4; and an immunoglobulin group comprising a constant region of an
CC   immunoglobulin. The invention is used to manufacture a medicament for
CC   inhibiting the proliferation of tumour cells in a mammalian subject. The
CC   composition comprising the fusion protein may also be used in treating
CC   autoimmune diseases (e.g. systemic lupus erythematosus, multiple
CC   sclerosis, diabetes mellitus, rheumatoid arthritis and asthma), renal
CC   diseases (e.g. glomerulonephritis), bronchitis, inflammation, graft
CC   rejection, anaemia and septic shock. The fusion proteins are also used in
CC   gene therapy. The present sequence is human wild-type immunoglobulin
CC   gamma1 region. This sequence is used in the exemplification of the
CC   invention
XX
SQ   Sequence 251 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 251;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         20 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 79

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         80 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 139

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 199

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 251


RESULT 18
AAY24154
ID   AAY24154 standard; protein; 259 AA.
XX
AC   AAY24154;
XX
DT   10-SEP-1999  (first entry)
XX
DE   Protein from pCd51neg1 comprising human IgG1 Fc region genomic DNA.
XX
KW   LDL; denatured; oxidised; arteriosclerosis; hyperlipidaemia;
KW   low density lipoprotein; receptor; detection; immunoglobulin;
KW   fusion protein.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO9932520-A1.
XX
PD   01-JUL-1999.
XX
PF   18-DEC-1998;   98WO-JP005744.
XX
PR   19-DEC-1997;   97JP-00364981.
PR   09-DEC-1998;   98JP-00349648.
PR   16-DEC-1998;   98JP-00358170.
XX
PA   (NISB ) JAPAN TOBACCO INC.
XX
PI   Sawamura T,  Kakutani M,  Masaki T;
XX
DR   WPI; 1999-418906/35.
DR   N-PSDB; AAX88533.
XX
PT   Fusion peptide for assay of oxidized LDL and for therapeutic use.
XX
PS   Example 1; Page 92-96; 105pp; Japanese.
XX
CC   The present invention describes a fusion peptide which consists of the
CC   extracellular domain of a mammalian oxidized LDL (low density
CC   lipoprotein) receptor, fused to a partial heavy chain of a mammalian
CC   immunoglobulin containing all or part of the constant region. Oxidized
CC   LDL is a denatured form of LDL occurring in patients having
CC   arteriosclerosis or hyperlipidaemia, and the fusion peptide can be used
CC   for the assay of oxidized LDL in biological samples from such patients,
CC   for the diagnosis of the disorders. It can also be used therapeutically
CC   for the prevention and treatment of arteriosclerosis and hyperlipidaemia.
CC   The present sequence represents the protein from the vector DNA of
CC   pCd51neg1 comprising human IgG1 Fc region genomic DNA
XX
SQ   Sequence 259 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 259;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         28 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 87

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         88 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 147

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        148 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 207

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        208 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 259


RESULT 19
AAE26273
ID   AAE26273 standard; protein; 267 AA.
XX
AC   AAE26273;
XX
DT   14-NOV-2002  (first entry)
XX
DE   Human tPAdeltapro/16-30/Fc fusion protein.
XX
KW   Human; amyloidogenic protein; Alzheimer's disease; Huntington's disease;
KW   spongiform encephalopathy; familial amyloid cardiomyopathy; amyloidosis;
KW   Gerstmann-Straussler-Scheinker syndrome; spongiform encephalopathy; GSS;
KW   Creutzfeldt-Jacob disease; insulinoma; diabetes; body myocytis; myeloma;
KW   CJ; tPA; tissue plasminogen activator; Fc region; chimeric.
XX
OS   Homo sapiens.
XX
PN   WO200242462-A2.
XX
PD   30-MAY-2002.
XX
PF   27-NOV-2001; 2001WO-US044581.
XX
PR   27-NOV-2000; 2000US-0253302P.
PR   29-NOV-2000; 2000US-0250198P.
PR   20-DEC-2000; 2000US-0257186P.
XX
PA   (PRAE-) PRAECIS PHARM INC.
XX
PI   Gefter ML,  Israel DI,  Joyal JL,  Gosselin M;
XX
DR   WPI; 2002-636427/68.
DR   N-PSDB; AAD43943.
XX
PT   Novel therapeutic agent useful for treating an amyloidogenic disorder,
PT   e.g. Alzheimer's disease, comprises an immunoglobulin heavy chain
PT   constant region linked to a peptide capable of binding amyloidogenic
PT   protein.
XX
PS   Example 10; Page 77-78; 79pp; English.
XX
CC   The invention relates to a compound comprising an immunoglobulin (Ig)
CC   heavy chain constant region or its fragment that retains the ability to
CC   bind an Fc receptor linked by a linker group or a direct bond to a
CC   peptide capable of binding an amyloidogenic protein. The invention is
CC   useful for clearing an amyloidogenic protein such as beta-amyloid,
CC   transthyretin (TTR), prion protein (PrP), islet amyloid polypeptide
CC   (IAPP), atrial natriuretic factor (ANF), kappa light chain, lambda light
CC   chain, amyloid A, procalcitonin, cystatin C, beta2-microglobulin, ApoA-I,
CC   gelsolin, calcitonin, fibrinogen, Huntington, alpha-synuclein and
CC   lysozyme from a subject and for treating an amyloidogenic disorder such
CC   as Alzheimer's disease and spongiform encephalopathy. Disorders treatable
CC   include those caused or characterised by deposits of TTR (eg. familial
CC   amyloid cardiomyopathy), PrP (eg. spongiform encephalopathies, including
CC   scrapie in sheep, bovine spongiform encephalopathy in cows and
CC   Creutzfeldt-Jacob disease (CJ) and Gerstmann-Straussler-Scheinker
CC   syndrome (GSS) in humans), IAPP (eg. insulinoma, adult onset diabetes),
CC   ANF (eg. isolated atrial amyloid), kappa or lambda light chain (eg.
CC   idiopathic amyloidosis, myeloma), amyloid A (eg. amyloidosis), Apo A-I
CC   (eg. hereditary non-neuropathic systemic amyloidosis), Gelsolin (eg.
CC   familial amyloidosis of Finnish type), Fibrinogen (eg. hereditary renal
CC   amyloidosis), Lysozyme (eg. hereditary systemic amyloidosis). Other
CC   examples of amyloidogenic disorders include Huntington's disease and
CC   inclusion body myocytis. The present sequence is tPAdeltapro/16-30/Fc
CC   fusion protein. This protein comprises human IgG1 Fc region, human tissue
CC   plasminogen activator (tPA) peptide and 16-30 amino acids of human beta
CC   amyloid peptide. This sequence is used in the exemplification of the
CC   invention
XX
SQ   Sequence 267 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 267;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         36 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 95

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         96 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 155

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 215

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 267


RESULT 20
ADJ52120
ID   ADJ52120 standard; protein; 269 AA.
XX
AC   ADJ52120;
XX
DT   06-MAY-2004  (first entry)
XX
DE   CH1 deleted mimetibody-related EMP-NfusCG1 amino acid sequence SeqID1112.
XX
KW   CH1 deleted mimetibody; osteopathic; cardiovascular-Gen;
KW   dermatological-Gen; auditory; endocrine-Gen; gastrointestinal-Gen;
KW   gynaecological-Gen; hepatotropic; haemostatic; immunomodulator;
KW   antiallergic; muscular-Gen; cytostatic; antiinflammatory; neuroleptic;
KW   ophthalmological; nephrotropic; respiratory-Gen; tumour necrosis factor;
KW   TNF; cytokine; bone disorder; joint disorder; cardiovascular disorder;
KW   dental disorder; oral disorder; dermatological disorder; ear disorder;
KW   nose disorder; throat disorder; endocrine disorder; metabolic disorder;
KW   gastrointestinal disorder; gynaecological disorder; hepatic disorder;
KW   obstetric disorder; haematologic disorder; immunological disorder;
KW   allergic disorder; infectious disorder; musculoskeletal disorder;
KW   oncological disorder; neurological disorder; nutritional disorder;
KW   ophthalmologic disorder; pediatric disorder; psychiatric disorder;
KW   renal disorder; pulmonary disorder; EMP-NfusCG1.
XX
OS   Unidentified.
OS   Synthetic.
XX
PN   WO2004002424-A2.
XX
PD   08-JAN-2004.
XX
PF   30-JUN-2003; 2003WO-US020495.
XX
PR   28-JUN-2002; 2002US-0392431P.
PR   19-SEP-2002; 2002US-0412144P.
XX
PA   (CENZ ) CENTOCOR INC.
XX
PI   Heavner GA,  Knight DM,  Ghrayeb J,  Scallon BJ,  Nesspor TC;
PI   Kutoloski KA;
XX
DR   WPI; 2004-082872/08.
XX
PT   New CH1 deleted mimetibody polypeptide and nucleic acid, useful for
PT   diagnosing, preventing or treating cardiovascular, dermatologic,
PT   endocrine, gastrointestinal, gynecologic, infectious, neurologic and
PT   nutritional disorders.
XX
PS   Claim 4; SEQ ID NO 1112; 123pp; English.
```

```
XX
CC   This invention relates to CH1 deleted mimetibodies (and the DNA sequences
CC   which encode them), compositions, methods and uses. The invention may be
CC   useful for the development of compounds with an osteopathic,
CC   cardiovascular-Gen, dermatological-Gen, auditory, endocrine-Gen,
CC   gastrointestinal-Gen, gynaecological-Gen, hepatotropic, haemostatic,
CC   immunomodulator, antiallergic, muscular-Gen, cytostatic,
CC   antiinflammatory, neuroleptic, ophthalmological, nephrotropic or
CC   respiratory-Gen activity acting as a tumour necrosis factor (TNF)-
CC   modulator or cytokine-agonist. The methods and compositions of the
CC   present invention are useful for the diagnosis, prevention and/or
CC   treatment of diseases or conditions associated with aberrant expression
CC   or activity of the CH1 deleted mimetibody, such as a bone or joint,
CC   cardiovascular, dental or oral, dermatological, ear, nose or throat,
CC   endocrine, metabolic, gastrointestinal, gynaecological, hepatic,
CC   obstetric, haematologic, immunological, allergic, infectious,
CC   musculoskeletal, oncological, neurological, nutritional, ophthalmologic,
CC   pediatric, psychiatric, renal or pulmonary disorders. The present
CC   sequence is the amino acid sequence of EMP-NfusCG1, a mimetibody of the
CC   invention.
XX
SQ   Sequence 269 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 269;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         38 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 97

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 157

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        158 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 217

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 269


RESULT 21
AAB47590
ID   AAB47590 standard; protein; 287 AA.
XX
AC   AAB47590;
XX
DT   11-SEP-2003  (revised)
DT   13-DEC-2001  (first entry)
XX
DE   Fusion protein of HSA:human IgG1 Fc.
XX
KW   Mouse; heat shock antigen; HSA; human; rat; signal transducer; CD24;
KW   fusion protein; inhibition; autoreactive T cell; aTC; autoimmune disease;
KW   multiple sclerosis; rheumatoid arthritis; systemic lupus erythematosus;
KW   psoriasis; diabetes; allergy; transplant rejection; transgenic mouse.
XX
OS   Homo sapiens.
OS   Mus musculus.
OS   Chimeric.
XX
PN   WO200172325-A1.
XX
PD   04-OCT-2001.
XX
PF   29-MAR-2001; 2001WO-US040390.
XX
PR   29-MAR-2000; 2000US-0192814P.
XX
PA   (OHIS ) UNIV OHIO STATE RES FOUND.
XX
PI   Liu Y,  Zheng P,  Bai X;
XX
DR   WPI; 2001-611581/70.
DR   N-PSDB; AAH43523, AAH43524.
XX
PT   Inhibiting tissue destruction by autoreactive T cells, useful for
PT   treating autoimmune diseases, by administering a heat-shock antigen/CD24
PT   polypeptide or its antibody.
XX
PS   Disclosure; Fig 10; 34pp; English.
XX
CC   This sequence represents a fusion protein which comprises the mouse heat
CC   shock antigen (HSA) fused to human IgG1 Fc. This protein may be used in
CC   the method of the invention for inhibiting destruction of tissue
CC   initiated by autoreactive T cells (aTC). The method is especially used to
CC   treat subjects suspected of having autoimmune diseases, particularly
CC   multiple sclerosis, rheumatoid arthritis, systemic lupus erythematosus,
CC   psoriasis, diabetes and allergy, also transplant rejection. Transgenic
CC   mice that express human CD24 on their T cells are useful as models for
CC   testing drugs for use against autoimmune diseases. (Updated on 11-SEP-
CC   2003 to standardise OS field)
XX
SQ   Sequence 287 AA;

  Query Match             100.0%;  Score 1263;  DB 4;  Length 287;
  Best Local Similarity   100.0%;  Pred. No. 1.9e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         56 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 115

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        116 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 175

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        176 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 235

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 287


RESULT 22
AAR91806
ID   AAR91806 standard; protein; 329 AA.
XX
AC   AAR91806;
XX
DT   20-SEP-1996  (first entry)
XX
DE   Human immunoglobulin gamma heavy chain constant region sequences.
XX
KW   alkaline phosphatase; label; antibody; IgG; H-chain; C-region; CH1; CH2;
KW   CH3; hinge; fusion protein; chimera; immunoassay.
XX
OS   Homo sapiens.
XX
PN   JP08070875-A.
XX
PD   19-MAR-1996.
XX
PF   05-SEP-1994;   94JP-00211035.
XX
PR   05-SEP-1994;   94JP-00211035.
XX
PA   (TOYJ ) TOSOH CORP.
XX
DR   WPI; 1996-203155/21.
DR   N-PSDB; AAT27385.
```

```
XX
PT   Recombinant alkaline phosphatase (AP)-antibody fusion protein - comprises
PT   AP fused downstream of antibody heavy or light chain, useful as
PT   immunoassay reagent.
XX
PS   Example 1; Page 13-15; 44pp; Japanese.
XX
CC   The gene coding for human alkaline phosphatase is fused downstream of a
CC   gene coding for either the variable and CH1 regions of an antibody heavy
CC   chain or an antibody light chain. Coexpression of the H- and L-chain
CC   sequences, one of which is fused to the AP gene, results in production of
CC   AP-labelled antibodies suitable for use in immunoassays. The present
CC   sequence is from a human IgG heavy chain constant region
XX
SQ   Sequence 329 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 329;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 157

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        158 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 217

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 277

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 329


RESULT 23
ADP56389
ID   ADP56389 standard; protein; 329 AA.
XX
AC   ADP56389;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Human PRO protein sequence SEQ ID NO:2365.
XX
KW   human; PRO; immune related disease; inflammatory immune response;
KW   immune response stimulation; antiallergic; antianaemic; antiarthritic;
KW   antiasthmatic; antidiabetic; antiinflammatory; antipsoriatic;
KW   antirheumatic; antithyroid; CNS; dermatological; gastrointestinal;
KW   haemostatic; hepatotropic; immunostimulant; immunosuppressive; muscular;
KW   nephrotropic; neuroprotective; osteopathic; respiratory; vasotropic;
KW   virucide; gene therapy.
XX
OS   Homo sapiens.
XX
PN   WO2004039956-A2.
XX
PD   13-MAY-2004.
XX
PF   28-OCT-2003; 2003WO-US034381.
XX
PR   29-OCT-2002; 2002US-0422472P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Aggarwal S,  Clark H,  Gurney AL,  Schoenfeld J,  Williams PM;
PI   Wood WI,  Wu TD;
XX
DR   WPI; 2004-376182/35.
DR   N-PSDB; ADP56388.
XX
PT   New PRO polynucleotides and polypeptides, useful in useful in diagnosing
PT   and treating an immune related disease, e.g. systemic lupus
PT   erythematosus, rheumatoid arthritis, diabetes mellitus or asthma and in
PT   stimulating an immune response.
XX
PS   Claim 1; SEQ ID NO 2365; 3009pp; English.
XX
CC   The present invention describes an isolated PRO nucleic acid (I). Also
CC   described: (1) a vector comprising (I); (2) a host cell comprising the
CC   vector of (1); (3) a process for producing a PRO polypeptides; (4) an
CC   isolated PRO polypeptide; (5) a chimeric molecule comprising the
CC   polypeptide of (4) fused to a heterologous amino acid sequence; (6) an
CC   antibody which specifically binds to a polypeptide of (4); (7) a
CC   composition of matter comprising a polypeptide of (4), an agonist or
CC   antagonist of the polypeptide or an antibody that binds to the
CC   polypeptide in combination with a carrier; (8) an article of manufacture
CC   comprising a container, a label on the container and a composition of
CC   matter of (7); (9) a method of treating an immune related disease in a
CC   mammal; (10) a method for determining the presence of a PRO polypeptide
CC   in a sample suspected of having the polypeptide; (11) a method of
CC   diagnosing an immune related disease or an inflammatory immune response
CC   in mammal; (12) a method of identifying a compound that inhibits or
CC   mimics the activity of or expression of a gene encoding a PRO polypeptide
CC   ; and (13) a method of stimulating the immune response in a mammal. The
CC   PRO sequences have antiallergic, antianaemic, antiarthritic,
CC   antiasthmatic, antidiabetic, antiinflammatory, antipsoriatic,
CC   antirheumatic, antithyroid, CNS, dermatological, gastrointestinal,
CC   haemostatic, hepatotropic, immunostimulant, immunosuppressive, muscular,
CC   nephrotropic, neuroprotective, osteopathic, respiratory, vasotropic and
CC   virucide activities, and can be used in gene therapy. The nucleic acid
CC   (I) and the encoded polypeptides, compositions, kits and methods are
CC   useful in diagnosing and treating an immune related disease and in
CC   stimulating an immune response. The present sequence represents a human
CC   PRO protein from the present invention.
XX
SQ   Sequence 329 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 329;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 157

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        158 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 217

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 277

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 329


RESULT 24
ADS82579
ID   ADS82579 standard; protein; 329 AA.
XX
AC   ADS82579;
XX
DT   16-DEC-2004  (first entry)
XX
DE   Human IgG1 heavy chain C-terminal fragment, SEQ ID 37.
XX
KW   Immunosuppressive; Cytostatic; Antirheumatic; Antiarthritic;
KW   Antiinflammatory; Gastrointestinal; Antipsoriatic; Gene therapy;
KW   antibody; interleukin-21 receptor; interleukin-21; receptor; IL-21;
KW   IL-21R; autoimmune disorder; rheumatoid arthritis;
KW   inflammatory bowel disease; Crohn's disease; transplant rejection;
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KW   psoriasis; hyperproliferative disorder; human; IgG1; heavy chain.
XX
OS   Homo sapiens.
XX
PN   WO2004083249-A2.
XX
PD   30-SEP-2004.
XX
PF   12-MAR-2004; 2004WO-US007444.
XX
PR   14-MAR-2003; 2003US-0454336P.
XX
PA   (AMHP ) WYETH.
PA   (CAMB-) CAMBRIDGE ANTIBODY TECHNOLOGY.
XX
PI   Young DA,  Whitters MJ,  Valge-Archer V,  Collins M,  Williams AJ;
PI   Witek J;
XX
DR   WPI; 2004-691025/67.
DR   N-PSDB; ADS82580.
XX
PT   New human antibodies that selectively bind to human interleukin-21
PT   receptor, useful for diagnosing, preventing or treating autoimmune
PT   disorders (e.g. rheumatoid arthritis) or hyperproliferative disorders.
XX
PS   Disclosure; SEQ ID NO 37; 143pp; English.
XX
CC   The present invention relates to human antibodies, or their antigen-
CC   binding fragments, that selectively bind to a human interleukin-21
CC   receptor (IL-21R). The antibodies of the invention are referred to as
CC   MUF, MUF-germline, MU11, 18G4, 18A5, 19F5, CP5G2 and R18. The antibodies
CC   selectively bind the extracellular domain of human IL-21R, or inhibit the
CC   binding of IL-21 to an IL-21R. Pharmaceutical compositions comprising an
CC   antibody or fragment of the invention are useful for diagnosing,
CC   preventing or treating autoimmune disorders (e.g. rheumatoid arthritis,
CC   inflammatory bowel disease, Crohn's disease, transplant rejection or
CC   psoriasis) or hyperproliferative disorders. The antibodies of the
CC   invention can comprise a human IgG1 constant domain sequences such as the
CC   present sequence.
XX
SQ   Sequence 329 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 329;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 157

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        158 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 217

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 277

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 329


RESULT 25
AAB04071
ID   AAB04071 standard; protein; 330 AA.
XX
AC   AAB04071;
XX
DT   11-APR-2001  (first entry)
XX
DE   Zcytor 10::IgG gamma fusion peptide.
XX
KW   zcytor 10 cytokine receptor; cytokine; receptor; antibody; ligand;
KW   binding; detection; modulation; recombinant cell; haematopoietic cell;
KW   lymphoid cell; myeloid cell; lymph; immune system; blood; bone;
KW   inflammatory response; inflammation; spleen; human.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO200068381-A1.
XX
PD   16-NOV-2000.
XX
PF   11-MAY-2000; 2000WO-US012924.
XX
PR   11-MAY-1999;   99US-00309861.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Presnell SR,  Foster DC,  Hammond AK,  Lok S;
XX
DR   WPI; 2001-016096/02.
DR   N-PSDB; AAA54473.
XX
PT   New cytokine receptor mouse zcytor 10, useful for detecting ligands that
PT   stimulate proliferation or development of hematopoietic, lymphoid and
PT   myeloid cells.
XX
PS   Example 17; Page 120-121; 134pp; English.
XX
CC   Isolating a nucleotide which encodes the zcytor 10 cytokine receptor
CC   enables the production of recombinant cells expressing the receptor.
CC   Those cells can then be used to detect the presence of a modulator of
CC   zcytor10 protein by culturing the cells in the presence of a test ligand
CC   and comparing levels of activity of mouse zcytor10 in the presence and
CC   absence of the test sample. Similarly, detection of zcytor10 receptor
CC   ligand within a test sample can be achieved. The method comprising
CC   contacting a test sample containing an amino acid sequence from Cys15 or
CC   Gly25 to Pro230 of the zcytor 10 cytokine receptor and detecting the
CC   binding of the polypeptide to a ligand in the sample. Specified peptide
CC   fragments of the zcytor 10 cytokine receptor and the methods described
CC   are used to identify ligands that stimulate the proliferation and/or
CC   development of haematopoietic, lymphoid and myeloid cells. Peptide
CC   fragments of the cytokine receptor are useful for treating lymphoid,
CC   immune, inflammatory, splenic, blood or bone disorders and for generating
CC   antibodies directed against the receptor. A vector expressing a secreted
CC   human zcytor 10 heterodimer is constructed. In this construct the
CC   extracellular cytokine binding domain of zcytor 10 is fused to the heavy
CC   chain of IgG gamma and the extracellular portion of the the heteromeric
CC   cytokine receptor subunit (an interleukin receptor subunit) is fused to
CC   human kappa light chain (See GENESEQ record AAA54474). The two sequences
CC   are fused together using two primers (AAA54475, AAA54476)
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 4;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
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RESULT 26
AAM47856
ID   AAM47856 standard; protein; 330 AA.
XX
AC   AAM47856;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Human Ig-gamma1 heavy chain constant region amino acid sequence.
XX
KW   Human; immunoadhesin; intercellular adhesion molecule; ICAM-1;
KW   human rhinovirus; immunoglobulin heavy chain; J chain; HRV; common cold;
KW   transgenic plant.
XX
OS   Homo sapiens.
XX
PN   WO200183529-A2.
XX
PD   08-NOV-2001.
XX
PF   28-APR-2001; 2001WO-US013932.
XX
PR   28-APR-2000; 2000US-0200298P.
XX
PA   (PLAN-) PLANET BIOTECHNOLOGY INC.
XX
PI   Larrick JW,  Wycoff KL;
XX
DR   WPI; 2002-041481/05.
DR   N-PSDB; ABA05265.
XX
PT   Immunoadhesin for treating human rhinovirus infection comprises chimeric
PT   intercellular adhesion molecule-1, and optionally a J chain and secretory
PT   component in association.
XX
PS   Disclosure; Fig 7; 138pp; English.
XX
CC   The invention relates to an immunoadhesin comprising: (a) a chimeric
CC   intercellular adhesion molecule (ICAM)-1 comprising a rhinovirus receptor
CC   protein linked to at least a portion of an immunoglobulin heavy chain;
CC   and (b) optionally a J chain and secretory component associated with the
CC   chimeric ICAM-1 molecule. The immunoadhesin has plant-specific
CC   glycosylation and virucide activity. The immunoadhesin is useful for
CC   reducing infection by human rhinovirus (HRV) and hence the initiation or
CC   spread of the common cold by HRV. The immunoadhesin binds to HRV and
CC   reduces its infectivity, competing with cell surface ICAM-1 for binding
CC   sites, interfering with virus entry or uncoating and directing premature
CC   release of viral RNA and formation of empty capsids. Expression of the
CC   immunoadhesin in plants would be tetrameric, rather than dimeric.
CC   Immunoadhesin having multiple binding sites have a higher effective
CC   affinity for the virus, thereby increasing the effectiveness of the
CC   immunoadhesin. Association of secretory component and immunoglobulin J
CC   chain increases the stability of the immunoadhesin in the mucosal
CC   environment. Production is significantly less expensive in plants than in
CC   animal cell culture and production in plants is safer for human use,
CC   since plants are not known to harbor any animal viruses. The present
CC   sequence is that of a human immunoglobulin protein sequence, useful to
CC   the invention
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 27
AAE21960
ID   AAE21960 standard; protein; 330 AA.
XX
AC   AAE21960;
XX
DT   25-JUL-2002  (first entry)
XX
DE   Human death domain containing receptor (DR6) protein-related protein.
XX
KW   Human; therapy; death domain containing receptor; DR6; receptor; anaemia;
KW   apoptosis; rheumatoid arthritis; eczema; asthma; psoriasis; pancreatitis;
KW   diabetes; cancer; multiple sclerosis; Graves disease; glomerulonephritis;
KW   transplant rejection; systemic lupus erythematosus; hepatitis; cirrhosis;
KW   autoimmune; gastritis; dermatosis; cardiopathy; infertility; haemostatic;
KW   H. pylori-associated ulceration; antiinflammatory; vasotropic; virucide;
KW   acquired immunedeficiency syndrome; AIDS; human immunodeficiency virus;
KW   HIV; haemolytic uraemic syndrome; HUS; immunodeficiency; neuroprotective;
KW   adult respiratory distress syndrome; ARDS; cytostatic; thyromimetic;
KW   dermatological; hepatotropic; antibacterial.
XX
OS   Homo sapiens.
XX
PN   WO200185209-A2.
XX
PD   15-NOV-2001.
XX
PF   30-APR-2001; 2001WO-US011735.
XX
PR   10-MAY-2000; 2000US-0203015P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Heuer JG,  Liu J,  Na S,  Song HY,  Yang D;
XX
DR   WPI; 2002-351283/38.
XX
PT   Treating or preventing T cell or Th2 cell mediated condition e.g., asthma
PT   or multiple sclerosis in mammal, comprises administering composition
PT   comprising death domain containing receptor, DR6 agonist or antagonist.
XX
PS   Disclosure; Page 132-133; 133pp; English.
XX
CC   The invention relates to a method for treating or preventing a T cell
CC   mediated condition or a Th2 cell mediated condition in a mammal. The
CC   method comprising administering to the mammal a pharmaceutical
CC   composition comprising a death domain containing receptor (DR6) agonist
CC   or antagonist. The method is useful for treating or preventing a T cell
CC   mediated condition or a Th2 cell mediated condition in a mammal. A DR6
CC   agonist is useful in the manufacture of a medicament for treating or
CC   preventing at least one symptom associated with aberrant apoptosis, graft
CC   -versus-host disease (GVHD), rheumatoid arthritis, eczema, asthma, atopy,
CC   inflammatory bowel disease, vasculitis, psoriasis, pancreatitis, insulin-
CC   dependent diabetes mellitus, cancer, multiple sclerosis, Hashimoto's
CC   thyroiditis, Graves disease, transplant rejection, systemic lupus
CC   erythematosus, autoimmune dermatosis, autoimmune cardiopathy, autoimmune
CC   infertility, Behcet's disease, autoimmune gastritis, fibrosing lung
CC   disease, organ rejection after transplantation, thrombotic
CC   thrombocytopenic purpura (TTP), chronic glomerulonephritis, haemolytic
CC   uraemic syndrome (HUS), aplastic anaemia, myelodysplasia, multiple organ
CC   dysfunction syndrome (MODS), adult respiratory distress syndrome (ARDS)
CC   or a condition or symptom related to the above mentioned diseases in a
```

CC mammal. An DR6 antagonist is useful in the manufacture of a medicament
CC for treating or preventing at least one symptom associated with
CC immunodeficiency, aberrant apoptosis, bacterial, viral or microbial
CC infection, complications of infection, human immunodeficiency virus
CC (HIV), HIV-induced lymphoma, HIV-induced acquired immunedeficiency
CC syndrome (AIDS), fulminant viral hepatitis B, fulminant viral hepatitis
CC C, autoimmune hepatitis, chronic hepatitis, chronic cirrhosis, H. pylori
CC associated ulceration, cytoprotection during cancer treatment,
CC recuperation from chemotherapy, recuperation from irradiation therapy, or
CC a condition or symptom related to the above mentioned diseases in a
CC mammal. The present sequence is human DR6 protein-related protein
XX
SQ Sequence 330 AA;

Query Match 100.0%; Score 1263; DB 5; Length 330;
Best Local Similarity 100.0%; Pred. No. 2.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 28
ABB81641
ID ABB81641 standard; protein; 330 AA.
XX
AC ABB81641;
XX
DT 25-SEP-2002 (first entry)
XX
DE Human IgG gamma 1 heavy chain SEQ ID NO:15.
XX
KW Human; zcytor19; cytokine receptor; immunosuppressive; cytostatic;
KW antirheumatic; antiarthritic; neuroprotective; antiinflammatory;
KW antidiabetic; nephrotropic; dermatological; anti-HIV; haemostatic;
KW vaccine; immune system; T-cell specific leukaemia; lymphoma; lupus;
KW autoimmune disease; rheumatoid arthritis; multiple sclerosis; HIV;
KW diabetes mellitus; inflammatory bowel disease; Crohn's disease; asthma;
KW immunologic renal disease; glomerulonephritis; vasculitis; polyarteritis;
KW mesangioproliferative disease; chronic lymphocytic leukaemia; bronchitis;
KW secondary glomerulonephritis; scleroderma; amyloidosis; multiple myeloma;
KW haemolytic uraemic syndrome; renal neoplasm; urological neoplasm;
KW emphysema; chronic airway disease.
XX
OS Homo sapiens.
XX
PN WO200244209-A2.
XX
PD 06-JUN-2002.
XX
PF 28-NOV-2001; 2001WO-US044808.
XX
PR 28-NOV-2000; 2000US-0253561P.
PR 07-FEB-2001; 2001US-0267211P.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Presnell SR, Xu W, Novak JE, Whitmore TE, Grant FJ;
XX
DR WPI; 2002-527700/56.
DR N-PSDB; ABQ73076.
XX
PT Novel Zyctor19 polypeptides and polynucleotides useful for stimulating
PT immune responses in animals for producing antibodies, and for treating
PT autoimmune diseases, leukemia and asthma.
XX
PS Example 7; Page 171-172; 200pp; English.
XX
CC The present invention describes an isolated human zcytor19 protein (I),
CC and truncated zcytor19 proteins. (I) has immunosuppressive, cytostatic,
CC antirheumatic, antiarthritic, neuroprotective, antiinflammatory,
CC antidiabetic, nephrotropic, dermatological, anti-HIV and haemostatic
CC activities, and can be used in vaccines. (I) or an antibody binding (I)
CC can be used for suppressing the immune system for reducing rejection of
CC tissue or organ transplants and grafts and for treating T-cell specific
CC leukaemias or lymphomas and autoimmune diseases including rheumatoid
CC arthritis, multiple sclerosis, diabetes mellitus, inflammatory bowel
CC disease and Crohn's disease. The antibodies can also be used for treating
CC immunologic renal diseases, glomerulonephritis, mesangioproliferative
CC disease, chronic lymphocytic leukaemia, secondary glomerulonephritis or
CC vasculitis associated with lupus, polyarteritis, scleroderma, HIV-related
CC diseases, amyloidosis and haemolytic uraemic syndrome. (I) and the
CC antibodies can also be used for renal or urological neoplasms and
CC multiple myelomas, asthma, bronchitis, emphysema and other chronic airway
CC diseases. Human zcytor19 is located to chromosome 1, more specifically to
CC chromosome 1p36.11. The present sequence represents a human IgG gamma 1
CC heavy chain protein, which is used in an example from the present
CC invention
XX
SQ Sequence 330 AA;

Query Match 100.0%; Score 1263; DB 5; Length 330;
Best Local Similarity 100.0%; Pred. No. 2.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 29
ABB05736
ID ABB05736 standard; protein; 330 AA.
XX
AC ABB05736;
XX
DT 01-MAY-2002 (first entry)
XX
DE Human immunoglobulin G gamma 1 protein sequence SEQ ID NO:38.
XX
KW Zcytor17; chromosome 5; 5q11; cytokine receptor; immunomodulatory;
KW antiinflammatory; antiviral; antirheumatic; antiarthritic; cytostatic;
KW muscular; lymphoid; immune; inflammatory; spleenic; blood; bone;
KW infection; immunosuppression; cytotoxicity; leukopenia; Crohn's disease;
KW autoimmune disease; rheumatoid arthritis; multiple sclerosis; cancer;
KW inflammatory disease; pancreatitis; inflammatory bowel disease.
XX
OS Homo sapiens.
XX
PN WO200200721-A2.
XX

PD 03-JAN-2002.
XX
PF 26-JUN-2001; 2001WO-US020484.
XX
PR 26-JUN-2000; 2000US-0214282P.
PR 29-JUN-2000; 2000US-0214955P.
PR 08-FEB-2001; 2001US-0267963P.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Sprecher CA, Presnell SR, Gao Z, Whitmore TE, Kuijper JL;
PI Maurer MF;
XX
DR WPI; 2002-090519/12.
DR N-PSDB; ABA93797.
XX
PT Isolated polynucleotide encoding a cytokine receptor zyctor17 which is
PT useful for treating and diagnosing lymphoid, immune, inflammatory,
PT spleenic, blood or bone disorders.
XX
PS Example 17; Page 187-188; 235pp; English.
XX
CC The present invention describes a cytokine receptor designated zcytor17.
CC Zcytor17 has immunomodulatory, antiinflammatory, antiviral, cytostatic,
CC antirheumatic, antiarthritic and muscular activities. The zcytor17
CC proteins are useful for treating and diagnosing lymphoid, immune,
CC inflammatory, spleenic, blood or bone disorders. Agonists or anti-
CC zcytor17 antibodies are useful in stimulating cell-mediated immunity and
CC for stimulating lymphocyte proliferation, such as in the treatment of
CC infections involving immunosuppression, including certain viral
CC infections. They are also useful for inducting cytotoxicity and for
CC treating leukopenias. Antagonist of zcytor17 polypeptides are useful for
CC treating autoimmune diseases (e.g. rheumatoid arthritis and multiple
CC sclerosis), inflammatory diseases (e.g. Crohn's disease), cancer,
CC pancreatitis, and inflammatory bowel disease. Zcytor17 was mapped to
CC chromosome 5, specifically to the 5q11 chromosomal region. ABA93767 to
CC ABA93843 and ABB05730 to ABB05745 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 330 AA;

Query Match 100.0%; Score 1263; DB 5; Length 330;
Best Local Similarity 100.0%; Pred. No. 2.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
```

RESULT 30
ABP71856
ID ABP71856 standard; protein; 330 AA.
XX
AC ABP71856;
XX
DT 17-APR-2003 (first entry)
XX
DE Human IgG1 Fcgamma region.
XX
KW Human; fusion protein; IgE Fcepsilon; IgG Fcgamma; FcepsilonRI; allergy;
KW FcepsilonRII; FcgammaRIIB; protein therapy; IgE; IgG; asthma; hay fever;
KW allergic asthma; allergic rhinitis; hay fever; food allergy;
KW atopic dermatitis; drug allergy; peanut allergen.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Region 1. .98
FT /label= CH1 region
FT Region 99. .113
FT /label= Hinge_region
FT Region 114. .223
FT /label= CH2_region
FT Region 224. .330
FT /label= CH3_region
XX
PN WO2002102320-A2.
XX
PD 27-DEC-2002.
XX
PF 14-JUN-2002; 2002WO-US019448.
XX
PR 15-JUN-2001; 2001US-0298710P.
XX
PA (TANO-) TANOX INC.
XX
PI An L, Wu H, Fung MSC;
XX
DR WPI; 2003-167440/16.
XX
PT New fusion protein which binds to FcepsilonRI or RII receptor and
PT FcgammaRIIB receptor, useful for treating or preventing allergies and
PT asthma, comprises an IgE Fcepsilon fragment and an IgG Fcgamma fragment.
XX
PS Disclosure; Fig 5; 32pp; English.
XX
CC The invention relates to a novel fusion protein comprising an IgE
CC Fcepsilon fragment and an IgG Fcgamma fragment, which binds to an
CC FcepsilonRI and/or FcepsilonRII receptor and an FcgammaRIIB receptor. The
CC fusion protein of the invention may have a use in protein therapy. The
CC fusion protein is useful in treating or preventing IgE-mediated allergies
CC and asthma, such as allergic asthma, allergic rhinitis, hay fever, food
CC allergy, atopic dermatitis and drug allergy. The allergic response is
CC particularly caused by peanut allergen. The present sequence represents
CC the human IgG1 Fcgamma fragment
XX
SQ Sequence 330 AA;

Query Match 100.0%; Score 1263; DB 6; Length 330;
Best Local Similarity 100.0%; Pred. No. 2.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
```

RESULT 31
AAE32915
ID AAE32915 standard; protein; 330 AA.
XX

```
AC   AAE32915;
XX
DT   24-MAR-2003  (first entry)
XX
DE   Human immunoglobulin G1 (IgG1) heavy chain Fc region.
XX
KW   T-cell; immunogenic; therapy; human; immunoglobulin G1; IgG1.
XX
OS   Homo sapiens.
XX
PN   WO200279232-A2.
XX
PD   10-OCT-2002.
XX
PF   30-MAR-2002; 2002WO-US009815.
XX
PR   30-MAR-2001; 2001US-0280625P.
XX
PA   (LEXI-) LEXIGEN PHARM CORP.
XX
PI   Gillies SD;
XX
DR   WPI; 2003-103259/09.
XX
PT   Reducing the immunogenicity of a fusion protein comprises changing an
PT   amino acid within the junction region to reduce the ability of the
PT   candidate T-cell epitope identified within the junction spanning to
PT   interact with T-cell receptor.
XX
PS   Disclosure; Page 49-50; 68pp; English.
XX
CC   The invention relates to a method for reducing the immunogenicity of a
CC   fusion protein which involves identifying a candidate T-cell epitope
CC   within a junction spanning a fusion junction of a fusion protein, and
CC   changing an amino acid within the junction region to reduce the ability
CC   of the candidate T-cell epitope to interact with a T-cell receptor. The
CC   method is useful for reducing the immunogenicity of a fusion protein. It
CC   is useful for analysing, changing or modifying one or more amino acids in
CC   the junction region of a fusion protein to identify a T-cell epitope and
CC   reduce its ability to interact with a T-cell receptor. The less
CC   immunogenic fusion proteins are useful in providing therapeutic
CC   treatment. The present sequence is human immunoglobulin G1 (IgG1) heavy
CC   chain Fc region used to illustrate the method of the invention
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 32
AAE32627
ID   AAE32627 standard; protein; 330 AA.
XX
AC   AAE32627;
XX
DT   24-MAR-2003  (first entry)
XX
DE   Human immunoglobulin G1 (IgG1) heavy chain Fc region.
XX
KW   Human; immunogenic; therapy; immunoglobulin G1; IgG1.
XX
OS   Homo sapiens.
XX
PN   WO200279415-A2.
XX
PD   10-OCT-2002.
XX
PF   29-MAR-2002; 2002WO-US009650.
XX
PR   30-MAR-2001; 2001US-0280625P.
XX
PA   (LEXI-) LEXIGEN PHARM CORP.
XX
PI   Gillies SD;
XX
DR   WPI; 2003-111794/10.
XX
PT   Reducing the immunogenicity of a fusion protein by changing an amino acid
PT   within the junction region spanning a fusion junction of a fusion protein
PT   to reduce the ability of the candidate T-cell epitope to interact with a
PT   T-cell receptor.
XX
PS   Disclosure; Page 49-50; 67pp; English.
XX
CC   The present invention relates to a method of reducing the immunogenicity
CC   of a fusion protein. The method involves identifying a candidate T-cell
CC   epitope within a junction region spanning a fusion junction of a fusion
CC   protein and changing an amino acid within the junction region to reduce
CC   the ability of the candidate T-cell epitope to interact with a T-cell
CC   receptor. The method is useful for reducing the immunogenicity of fusion
CC   proteins for use in therapy. The present sequence is human immunoglobulin
CC   G1 (IgG1) heavy chain Fc region. This sequence is used to illustrate the
CC   method of the invention
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 33
ABR82103
ID   ABR82103 standard; protein; 330 AA.
XX
AC   ABR82103;
XX
DT   23-SEP-2003  (first entry)
XX
DE   Human DR6 related amino acid sequence SEQ ID NO:5.
XX
KW   Human; DR6; B-cell mediated disease; immunosuppressive; antirheumatic;
```

```
KW   antiarthritic; antiasthmatic; dermatological; antiinflammatory;
KW   antipsoriatic; antidiabetic; cytostatic; neuroprotective; thyromimetic;
KW   antithyroid; nephrotropic; antiinfertility; vasotropic; virucide;
KW   hepatotropic; antibacterial; antiulcer; haemostatic; antianaemic;
KW   antimicrobial; anti-HIV; DR6 agonist; DR6 antagonist; immunity.
XX
OS   Homo sapiens.
XX
PN   WO2003051290-A2.
XX
PD   26-JUN-2003.
XX
PF   10-DEC-2002; 2002WO-US037596.
XX
PR   17-DEC-2001; 2001US-0342632P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Liu J,  Na S,  Song HY,  Yang D;
XX
DR   WPI; 2003-541604/51.
XX
PT   Treating or preventing a B cell mediated condition e.g., chronic
PT   hepatitis or chronic cirrhosis, in a mammal by administering a
PT   pharmaceutical composition comprising a DR6 agonist or DR6 antagonist to
PT   the mammal.
XX
PS   Disclosure; Page 96-97; 97pp; English.
XX
CC   The present invention describes a method (M1) for treating or preventing
CC   a B cell mediated condition in a mammal by administering a pharmaceutical
CC   composition comprising a DR6 agonist or DR6 antagonist to the mammal.
CC   Also described: (1) inhibiting B cell mediated immunity in a mammal, by
CC   administering a pharmaceutical composition comprising at least one DR6
CC   agonist; (2) use of a DR6 agonist in the manufacture of a medicament for
CC   treating or preventing at least one symptom associated with conditions
CC   (C1) such as aberrant apoptosis, graft-versus-host disease (GVHD), atopy,
CC   rheumatoid arthritis, asthma, eczema, inflammatory bowel disease, cancer,
CC   vasculitis, psoriasis, insulin-dependent diabetes mellitus, pancreatitis,
CC   psoriasis, multiple sclerosis, Hashimoto's thyroiditis, Graves' disease,
CC   transplant rejection, systemic lupus erythematosus, Behcet's disease,
CC   autoimmune nephropathy, autoimmune haematopathy, idiopathic interstitial
CC   pneumonia, hypersensitivity pneumonitis, autoimmune dermatosis,
CC   autoimmune cardiopathy, autoimmune infertility, autoimmune gastritis,
CC   fibrosing lung disease, fulminant viral hepatitis B, fulminant viral
CC   hepatitis C, autoimmune hepatitis, chronic hepatitis, chronic cirrhosis,
CC   Helicobacter pylori-associated ulceration, organ rejection after
CC   transplantation, chronic glomerulonephritis, thrombotic thrombocytopenic
CC   purpura (TTP) and haemolytic uraemic syndrome (HUS), aplastic anaemia,
CC   myelodysplasia, multiple organ dysfunction syndrome (MDS), adult
CC   respiratory distress syndrome (ARDS), and at least one condition or
CC   symptom related to the conditions, in a mammal; and (3) use of DR6
CC   antagonist in the manufacture of a medicament for treating or preventing
CC   at least one symptom associated with conditions (C2) such as aberrant
CC   apoptosis, immunodeficiency, bacterial infection, viral infection,
CC   microbial infection, complications of infection, HIV, HIV-induced
CC   lymphoma, HIV-induced AIDS, fulminant viral hepatitis B, fulminant viral
CC   hepatitis C, autoimmune hepatitis, chronic hepatitis, chronic cirrhosis,
CC   H. pylori-associated ulceration, cytoprotection during cancer treatment,
CC   recuperation from chemotherapy, recuperation from irradiation therapy,
CC   and at least one condition or symptom related to the conditions, in a
CC   mammal. DR6 has immunosuppressive, antirheumatic, antiarthritic,
CC   antiasthmatic, dermatological, antiinflammatory, antipsoriatic,
CC   antidiabetic, cytostatic, neuroprotective, thyromimetic, antithyroid,
CC   nephrotropic, antiinfertility, vasotropic, virucide, hepatotropic,
CC   antibacterial, antiulcer, haemostatic, antianaemic, antimicrobial and
CC   anti-HIV activities. (M1) is useful for treating or preventing at least
CC   one symptom associated with (C1) in a mammal, preferably human, by
CC   administering DR6 agonist, and for treating or preventing at least one
CC   symptom associated with (C2) by administering DR6 antagonist. The present
CC   sequence represents a human DR6 related amino acid sequence, which is
CC   given in the exemplification of the present invention
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 34
AAO31102
ID   AAO31102 standard; protein; 330 AA.
XX
AC   AAO31102;
XX
DT   06-OCT-2003  (first entry)
XX
DE   Human A2-G8 SCF antibody heavy chain constant region.
XX
KW   Human; antibody; stem cell factor; mast cell growth factor; asthma; SCF;
KW   steel factor; c-kit ligand; gene therapy; heavy chain.
XX
OS   Homo sapiens.
XX
PN   WO2003051311-A2.
XX
PD   26-JUN-2003.
XX
PF   16-DEC-2002; 2002WO-US040227.
XX
PR   17-DEC-2001; 2001US-0342174P.
XX
PA   (FARB ) BAYER CORP.
XX
PI   Takeuchi T,  Tomkinson A,  Neben S;
XX
DR   WPI; 2003-523500/49.
DR   N-PSDB; AAL62618.
XX
PT   New purified human antibody that binds to stem cell factor protein,
PT   useful for preparing a composition for treating asthma.
XX
PS   Example 10; Page 47-48; 94pp; English.
XX
CC   The invention provides human antibodies that bind to stem cell factor
CC   (SCF) protein. SCF is also known as mast cell growth factor, steel factor
CC   or c-kit ligand. Antibodies of the invention are useful for preparing
CC   compositions for treating asthma. They are also used in gene therapy. The
CC   present sequence is human SCF antibody heavy chain constant region
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158
```

```
Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 35
ABR55836
ID   ABR55836 standard; protein; 330 AA.
XX
AC   ABR55836;
XX
DT   02-SEP-2003  (first entry)
XX
DE   Anti-Ang-2 antibody IgG1 constant region.
XX
KW   Ang-2; angiopoietin-2; anorectic; cytostatic; antiarteriosclerotic;
KW   gynaecological; antiinflammatory; osteopathic; antipsoriatic; cancer;
KW   angiogenesis; antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2003030833-A2.
XX
PD   17-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032613.
XX
PR   11-OCT-2001; 2001US-0328604P.
PR   10-OCT-2002; 2002US-00269805.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Oliner JD;
XX
DR   WPI; 2003-504963/47.
XX
PT   New specific binding agents (i.e. anti-Angiopoietin-2 antibodies), useful
PT   for inhibiting undesired angiogenesis, or treating e.g. cancers, obesity,
PT   hemangioma, arteriosclerosis, atherosclerosis or endometriosis.
XX
PS   Example 4; Page 96; 161pp; English.
XX
CC   The invention relates to a specific binding agent, which comprises at
CC   least one peptide selected from any of 62 peptides (ABR55769-830) or its
CC   fragment. The binding agents are antibodies that recognize and bind to
CC   angiopoietin-2 (Ang-2). The specific binding agent, particularly the
CC   antibody, is useful for inhibiting undesired angiogenesis, treating
CC   cancers, inhibiting undesired angiogenesis, modulating or inhibiting Ang-
CC   2 activity, modulating vascular permeability or plasma leakage, or
CC   treating a disease (e.g. ocular neovascular disease, obesity,
CC   haemangioblastoma, haemangioma, arteriosclerosis, inflammatory disease,
CC   inflammatory disorders, atherosclerosis, endometriosis, neoplastic
CC   disease, bone-related disease, or psoriasis) in a mammal. The present
CC   sequence represents a human IgG1 constant region of an anti-Ang-2
CC   antibody
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 36
AAO30893
ID   AAO30893 standard; protein; 330 AA.
XX
AC   AAO30893;
XX
DT   22-SEP-2003  (first entry)
XX
DE   Human immunoglobulin gamma (IgG) 1 constant region.
XX
KW   Cytokine; interleukin-2; IL-2; cancer; viral infection; immune disorder;
KW   gene therapy; immunoglobulin; Ig; human.
XX
OS   Homo sapiens.
XX
PN   WO2003048334-A2.
XX
PD   12-JUN-2003.
XX
PF   04-DEC-2002; 2002WO-US038780.
XX
PR   04-DEC-2001; 2001US-0337113P.
PR   12-APR-2002; 2002US-0371966P.
XX
PA   (EMDL-) EMD LEXIGEN RES CENT CORP.
XX
PI   Gillies SD;
XX
DR   WPI; 2003-513757/48.
XX
PT   New fusion protein comprising a non-IL-2 moiety fused to a mutant IL-2
PT   moiety, useful for preparing a composition for treating cancer, viral
PT   infections or immune disorders.
XX
PS   Example 1; Page 51-53; 71pp; English.
XX
CC   The invention relates to cytokine fusion proteins with increased
CC   therapeutic index and methods for increasing the therapeutic index of
CC   such fusion proteins. The fusion protein comprises a non-interleukin-2
CC   (IL-2) moiety fused to a mutant IL-2 moiety. It is useful for preparing a
CC   composition for treating cancer, viral infections or immune disorders.
CC   The fusion protein is also used in gene therapy. The present sequence is
CC   human immunoglobulin gamma (IgG) constant region. This sequence is used
CC   to illustrate the method of the invention
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
```

```
Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
```

RESULT 37
ADF11389
ID ADF11389 standard; protein; 330 AA.
XX
AC ADF11389;
XX
DT 12-FEB-2004 (first entry)
XX
DE Anti-OPGL antibody heavy chain constant region SEQ ID NO:2.
XX
KW human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;
KW osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;
KW osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.
XX
OS Homo sapiens.
XX
PN WO2003086289-A2.
XX
PD 23-OCT-2003.
XX
PF 07-APR-2003; 2003WO-US010749.
XX
PR 05-APR-2002; 2002US-0370407P.
XX
PA (AMGE-) AMGEN INC.
XX
PI Boyle WJ, Medlock E, Sullivan JK, Elliott RL, Martin F, Huang H;
XX
DR WPI; 2003-845253/78.
DR N-PSDB; ADF11388.
XX
PT New isolated antibody that specifically binds osteoprotegerin ligand,
PT useful for diagnosing or treating bone disorders, such as osteoporosis,
PT bone loss from arthritis, Paget's disease or osteopenia.
XX
PS Example 3; SEQ ID NO 2; 156pp; English.
XX
CC The present invention describes an isolated human antibody (I) that
CC specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a
CC pharmaceutical composition comprising a pharmaceutical carrier and a
CC therapeutic amount of (I); (2) methods of treating an osteopenic disorder
CC in a patient, comprising administering to a patient the pharmaceutical
CC composition of (1) or a pharmaceutical amount of (I); and (3) a method
CC for detecting OPGL in a biological sample, comprising contacting the
CC sample with (I) under conditions that allow for binding of the antibody
CC to OPGL, and measuring the level of bound antibody in the sample. (I) has
CC osteopathic, antiarthritic and cytostatic activities, and can be used in
CC gene therapy. The composition and methods are useful in diagnosing or
CC treating bone disorders, such as osteoporosis, bone loss from arthritis,
CC Paget's disease or osteopenia. The antibody (I) may also be used for
CC detecting OPGL in biological samples and in identifying cells or tissues
CC that produce the protein. The present sequence represents a sequence
CC which is used in the exemplification of the present invention.
XX
SQ Sequence 330 AA;

```
  Query Match           100.0%;  Score 1263;  DB 7;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
```

RESULT 38
ADE97351
ID ADE97351 standard; protein; 330 AA.
XX
AC ADE97351;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human IgG1 heavy chain constant region protein - SEQ ID 20.
XX
KW immunoadhesin; immunoglobulin heavy chain; J chain; joining; toxin;
KW virucide; antibacterial; anthrax; rhinovirus infection; common cold;
KW intercellular adhesion molecule; ICAM-1; human; constant region; IgG.
XX
OS Homo sapiens.
XX
PN WO2003064992-A2.
XX
PD 07-AUG-2003.
XX
PF 25-OCT-2002; 2002WO-US034197.
XX
PR 26-OCT-2001; 2001US-00047542.
XX
PA (PLAN-) PLANET BIOTECHNOLOGY INC.
PA (LARR/) LARRICK J W.
PA (WYCO/) WYCOFF K L.
XX
PI Larrick JW, Wycoff KL;
XX
DR WPI; 2003-636816/60.
DR N-PSDB; ADE97350, ADE97376.
XX
PT New immunoadhesin, useful for treating anthrax and rhinovirus, comprises
PT chimeric toxin receptor protein linked to immunoglobulin heavy chain, and
PT J chain and secretory component associated with the chimeric toxin
PT receptor protein.
XX
PS Disclosure; SEQ ID NO 20; 288pp; English.
XX
CC The invention relates to a novel immunoadhesin comprising a chimeric
CC toxin receptor protein consisting of a toxin receptor protein linked to
CC at least a portion of an immunoglobulin heavy chain with a J (joining)
CC chain and secretory component (SC) associated with the chimeric toxin
CC receptor protein. The immunoadhesin comprises a chimeric bacterial or
CC viral toxin receptor protein and the immunoadhesin has plant-specific
CC glycosylation. The immunoadhesin of the invention demonstrates virucide
CC and antibacterial activities and may be useful for reducing the binding
CC of a viral or bacterial antigen to a host cell and thus for treating or
CC preventing anthrax, as well as human rhinovirus infection which results
CC in the common cold. The current sequence is that of the human
CC immunoadhesion-related protein of the invention.
XX
SQ Sequence 330 AA;

```
  Query Match           100.0%;  Score 1263;  DB 7;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
```

RESULT 39
ADF83605
ID ADF83605 standard; protein; 330 AA.
XX
AC ADF83605;
XX
DT 26-FEB-2004 (first entry)
XX
DE Cytokine receptor related human Zcytor19 protein, SEQ ID No 15.
XX
KW soluble cytokine receptor; virucide; cytostatic; immunosuppressive;
KW antirheumatic; antiarthritic; neuroprotective; antidiabetic;
KW nephrotropic; antiinflammatory; viral infection; cancer;
KW autoimmune disease; ligand blocking; human.
XX
OS Homo sapiens.
XX
PN WO2003089603-A2.
XX
PD 30-OCT-2003.
XX
PF 18-APR-2003; 2003WO-US012030.
XX
PR 19-APR-2002; 2002US-0373813P.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Presnell SR, Xu W, Novak JE, Whitmore TE, Grant FJ;
PI Kindsvogel WR, Klucher KM;
XX
DR WPI; 2003-854110/79.
DR N-PSDB; ADF83604.
XX
PT New Zcytor19 receptor polypeptides and polynucleotides, useful for
PT detecting and treating viral infections, cancer or autoimmune diseases
PT (e.g. rheumatoid arthritis, multiple sclerosis, diabetes or
PT glomerulonephritis).
XX
PS Example 7; SEQ ID NO 15; 186pp; English.
XX
CC The invention relates to a novel isolated polynucleotide that encodes a
CC soluble cytokine receptor polypeptide. The encoded polypeptide comprises:
CC a sequence of 211 amino acids fully defined in the specification, or a
CC region from amino acid residues 21-163, 1-163, 21-211 or 1-211; or a
CC sequence at least 90% identical to the 211 amino acids. The cytokine
CC polynucleotides and polypeptides have the following activities: virucide,
CC cytostatic, immunosuppressive, antirheumatic, antiarthritic,
CC neuroprotective, antidiabetic, nephrotropic, and antiinflammatory. The
CC composition and methods are useful in detecting and treating viral
CC infections, cancer or autoimmune diseases (e.g. rheumatoid arthritis,
CC multiple sclerosis, diabetes, glomerulonephritis or inflammatory bowel
CC diseases) in vitro and in vivo. The ligand-binding receptor polypeptides
CC may also be used in blocking ligand activity in vitro and in vivo. This
CC sequence represents a cytokine receptor related human protein of the
CC invention.
XX
SQ Sequence 330 AA;

```
  Query Match             100.0%;  Score 1263;  DB 7;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
```

RESULT 40
ADF75001
ID ADF75001 standard; protein; 330 AA.
XX
AC ADF75001;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human Ig gamma-1 heavy chain constant region.
XX
KW Human; fusion protein; epitope; major histocompatibility complex;
KW MHC type II; T-cell receptor; immunogenicity; glycosylation; cytokine;
KW hormone.
XX
OS Homo sapiens.
XX
PN US2003166877-A1.
XX
PD 04-SEP-2003.
XX
PF 29-MAR-2002; 2002US-00112582.
XX
PR 30-MAR-2001; 2001US-0280625P.
XX
PA (LEXI-) LEXIGEN PHARM CORP.
XX
PI Gillies SD, Way J, Hamilton AA;
XX
DR WPI; 2003-898110/82.
XX
PT Reducing the immunogenecity of a fusion protein by identifying a
PT candidate T-cell epitope within a junction region spanning a fusion
PT protein and changing an amino acid within the junction region.
XX
PS Disclosure; SEQ ID NO 1; 34pp; English.
XX
CC The invention relates to reducing the immunogenicity of a fusion protein
CC comprising: identifying a candidate T-cell epitope (binding to MHC class
CC II (major histocompatibility complex)) within a junction region spanning
CC a fusion protein and changing an amino acid within the junction region to
CC reduce the ability of the candidate T-cell epitope to interact with a T-
CC cell receptor. Also included are a method for reducing the immunogenicity
CC of a fusion protein, a fusion protein with reduced immunogenicity and a
CC nucleic acid encoding the fusion protein with reduced immunogenicity. The
CC method also comprises introducing a glycosylation site within 5 or 2
CC amino acids of the fusion junction. The first protein of the fusion
CC protein comprises IgG1 or IgG2, having a C-terminal that is linked to the
CC N-terminus of the second protein. The second protein comprises cytokine
CC or hormone activity. The junction region comprises a spacer or linker. It
CC comprises an Asn-X-Ser/Thr-Gly-amino acid sequence, where X is any amino

```
CC   acid. It comprises an IgG sequence having an ATAT amino acid sequence
CC   instead of an LSLS amino acid sequence. The method is useful for reducing
CC   the immunogenicity of a fusion protein. The present sequence is a human
CC   IgG protein suitable for inclusion in a fusion protein.
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 41
ADM41537
ID   ADM41537 standard; protein; 330 AA.
XX
AC   ADM41537;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Anti-interleukin-1 receptor type 1 antibody heavy chain constant region.
XX
KW   Human; monoclonal antibody; antibody; interleukin-1; receptor;
KW   antiasthmatic; antiinflammatory; dermatological; antiallergic;
KW   protozoacide; antirheumatic; antiarthritic; osteopathic; vasotropic;
KW   analgesic; antidiabetic; nephrotropic; antianaemic; nootropic;
KW   anticonvulsant; dermatological; antigout; antiparkinsonian; antidiabetic;
KW   cytostatic.
XX
OS   Homo sapiens.
XX
PN   WO2004022718-A2.
XX
PD   18-MAR-2004.
XX
PF   05-SEP-2003; 2003WO-US027978.
XX
PR   06-SEP-2002; 2002US-0408719P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Varnum B,  Vezina C,  Witte A,  Qian X,  Martin F,  Huang H;
PI   Elliott G;
XX
DR   WPI; 2004-248462/23.
DR   N-PSDB; ADM41536.
XX
PT   Isolated human antibody that specifically binds interleukin-1 receptor
PT   type 1 (IL-1R1) useful for treating IL-1 mediated diseases such as
PT   rheumatoid arthritis, osteoarthritis and inflammatory conditions.
XX
PS   Disclosure; SEQ ID NO 2; 179pp; English.
XX
CC   The present sequence is that of a human anti-interleukin-1 receptor type
CC   1 (IL-1R1) monoclonal antibody (MAb) heavy chain IgG1 constant region.
CC   Human MAbs to IL-1R1 were prepared using the HCo7 strain of transgenic
CC   mice, which expresses human antibody genes. These mice were immunised
CC   with purified recombinant IL-1R1, and splenocytes from immunised mice
CC   were fused to a mouse myeloma cell line to generate hybridomas.
CC   Hybridomas which secreted a MAb that bound with high avidity to IL-1R1
CC   were selected. The MAbs inhibit IL-1 signalling by competing with IL-
CC   1beta and IL-1alpha binding to IL-1R. These MAbs, as well as single chain
CC   antibodies single chain Fv antibodies, Fab antibodies, Fab' antibodies
CC   and (Fab')2 antibodies derived from them, are used in methods of treating
CC   IL-1 mediated diseases or for detecting the amount of IL-1R1 in a sample.
CC   IL-1 mediated diseases include acute pancreatitis, amyotrophic lateral
CC   sclerosis, Alzheimer's disease, cachexia, anorexia, asthma,
CC   atherosclerosis, autoimmune vasculitis, chronic fatigue syndrome,
CC   Clostridium associated illnesses, coronary conditions, cancer including
CC   leukaemia and tumour metastasis, diabetes, endometriosis, fever,
CC   fibromyalgia, glomerulonephritis, graft versus host disease,
CC   osteoarthritis, rheumatoid arthritis, inflammatory eye disease,
CC   ischaemia, Kawasaki's disease, learning impairment, lung diseases,
CC   multiple sclerosis, myopathy, osteoporosis, pain, Parkinson's disease,
CC   periodontal disease, pre-term labour, psoriasis, reperfusion injury,
CC   septic shock, side effects of radiation therapy, temporal mandibular
CC   joint disease, sleep disturbance, uveitis, or an inflammatory condition
CC   resulting from strain, sprain, cartilage damage, trauma, orthopaedic
CC   surgery, infection or other disease processes.
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 42
ADM68911
ID   ADM68911 standard; protein; 330 AA.
XX
AC   ADM68911;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human IgG1 heavy chain.
XX
KW   Human; batch reformatting vector; ligand screening; phagemid;
KW   phage display vector; pBRV; pRRV; internal ribosome entry site; IRES;
KW   rapid reformatting vector; IgG1; immunoglobulin; heavy chain.
XX
OS   Homo sapiens.
XX
PN   US2003224408-A1.
XX
PD   04-DEC-2003.
XX
PF   07-MAR-2003; 2003US-00383902.
XX
PR   07-MAR-2002; 2002US-0362403P.
XX
PA   (DYAX-) DYAX CORP.
XX
PI   Hoogenboom HRJM,  Mullberg J,  Ladner RC;
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XX
DR   WPI; 2004-119700/12.
DR   N-PSDB; ADM68909.
XX
PT   Screening ligands, by providing initial nucleic acid cassettes, modifying
PT   cassette in single reaction mixture, introducing modified cassette into
PT   mammalian cell, expressing modified cassette in transfected cells.
XX
PS   Disclosure; SEQ ID NO 6; 63pp; English.
XX
CC   The invention relates to screening ligands, by providing several initial
CC   nucleic acid cassettes, modifying each nucleic acid cassette in single
CC   reaction mixture so that it is functional in a second expression system,
CC   introducing each modified nucleic acid cassette into a mammalian cell to
CC   produce a mixture of transfected cells, and expressing each modified
CC   nucleic acid cassette in transfected cells. Also included are screening
CC   nucleic acids (involving providing a number of first different nucleic
CC   acids, each encoding a hetero oligomeric candidate ligand, selecting a
CC   subset of a number of first different nucleic acids by contacting
CC   candidate ligands encoded by the members of a number of first different
CC   nucleic acids to a target, reformatting each nucleic acid of the subset
CC   for mammalian cell expression, such that each nucleic acid encodes a
CC   hetero-oligomeric protein that includes a first functional domain of one
CC   subunit of the candidate ligand, a second functional domain of another
CC   subunit of the candidate ligand and an effector domain not encoded by the
CC   nucleic acids of a number of first different nucleic acids, introducing
CC   members of the subset into a mammalian cell to form several expression
CC   cells that can produce the protein that includes the functional domain
CC   and the effector domain, and screening the expression cells to identify
CC   cells that produce at least a threshold amount of a ligand-effector
CC   domain fusion protein) and evaluating display library members (involving
CC   providing several display library members, determining an assessment for
CC   each library member with respect to a property, storing information about
CC   the assessments of the library members in a computer database, filtering
CC   the information to identify a subset of the library members, and
CC   reformatting each member of the subset for expression in a mammalian cell
CC   by a method that comprises disposing nucleic acid for each member of the
CC   selected subset into a single container). The method is useful for
CC   screening ligands. Bacterial and mammalian expression vectors
CC   (reformatting vectors) were prepared that support the transfer
CC   individually or en masse of Fab heavy and light chain genes from a
CC   bacterial expression vector to a mammalian expression vector. Typically,
CC   the display vector was a phagemid or phage display vector, which mediate
CC   the expression of the Fab on the surface of the bacteriophage M13 or fd.
CC   The Fab-encoding segment was transferred from the bacterial display
CC   vector to the eukaryotic vector, e.g., pBRV or pRRV by restricting the
CC   vector with ApaL1 and BstE2. This fragment was subcloned into ApaL1/BstE2
CC   sites of pBRV (batch reformatting vector) or pRRV (rapid reformatting
CC   vector). This vector contained a CMV eukaryotic promoter in place of the
CC   first bacterial leader sequence. The VH-CH1 sequence was no longer fused
CC   to gene III but was fused in-frame to a sequence encoding an
CC   immunoglobulin Fc region, e.g., including Hinge-CH2-CH3. Two intervening
CC   segments which were inserted between heavy and light chain coding
CC   sequences were IrES between the EcoRI and XhaI site for internal ribosome
CC   entry and translation of the second coding region. The present sequence
CC   represents the human IgG1 heavy chain for use in the constructs of the
CC   method of the invention.
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 43
ADN36570
ID   ADN36570 standard; protein; 330 AA.
XX
AC   ADN36570;
XX
DT   17-JUN-2004  (first entry)
XX
DE   Chemokine receptor inhibitor-related protein IgG1 #15.
XX
KW   Chemokine receptor inhibitor; chimeric protein; HIV infection;
KW   tumour metastasis; organ transplant rejection; autoimmune disease;
KW   anti-HIV; cytostatic; immunosuppressive; IgG1; immunoglobulin G1.
XX
OS   Unidentified.
XX
PN   CN1435433-A.
XX
PD   13-AUG-2003.
XX
PF   30-AUG-2002; 2002CN-00129301.
XX
PR   30-AUG-2002; 2002CN-00129301.
XX
PA   (GONG/) GONG X.
XX
PI   Gong J;
XX
DR   WPI; 2004-000227/01.
DR   N-PSDB; ADN36588.
XX
PT   Long-acting broad-spectrum chemotactic factor receptor inhibiting matter.
XX
PS   Example 2; Page 28; 43pp; Chinese.
XX
CC   The invention relates to chimeric proteins for inhibition of chemokine
CC   receptors. The invention also relates to nucleic acids encoding the
CC   chimeric proteins, and a process for preparing and testing the chimeric
CC   proteins. The chimeric proteins provide long-acting, broad spectrum
CC   inhibition of chemokine receptors with high selectivity. They can be used
CC   to prevent or treat HIV infection, tumour metastasis, organ transplant
CC   rejection and autoimmune diseases. The present sequence represents a
CC   protein sequence which may be incorporated into a chimeric protein of the
CC   invention.
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
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Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 44
ADN97485
ID   ADN97485 standard; protein; 330 AA.
XX
AC   ADN97485;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Artificial protein construction protein #1.
XX
KW   artificial proprotein; propeptide; protein engineering; antibody.
XX
OS   Unidentified.
XX
PN   WO2004031362-A2.
XX
PD   15-APR-2004.
XX
PF   03-OCT-2003; 2003WO-US031420.
XX
PR   03-OCT-2002; 2002US-0415940P.
XX
PA   (LARG-) LARGE SCALE BIOLOGY CORP.
XX
PI   Reini SJ,  Edwards P;
XX
DR   WPI; 2004-330170/30.
DR   N-PSDB; ADN97484.
XX
PT   New artificial proprotein comprises three peptide sequences, useful for
PT   artificial multimeric protein engineering in eukaryotes.
XX
PS   Example 15; SEQ ID NO 58; 244pp; English.
XX
CC   The invention relates to an artificial proprotein comprising three
CC   peptide sequences: a first peptide sequence of interest, a propeptide
CC   sequence attached to the C-terminus of the first peptide sequence of
CC   interest, and a second peptide of interest attached to the C-terminus of
CC   the propeptide sequence. The artificial proprotein and polynucleotides
CC   are useful for artificial multimeric protein engineering, e.g. antibodies
CC   and antibody fragments in eukaryotes. This sequence corresponds to a
CC   protein used in the generation of the protein of the invention.
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 45
ADR43460
ID   ADR43460 standard; protein; 330 AA.
XX
AC   ADR43460;
XX
DT   04-NOV-2004  (first entry)
XX
DE   Heavy chain constant region of clone Mab 136.
XX
KW   antibody; variable light chain; variable heavy chain; Antiallergic;
KW   Dermatological; Immunosuppressive; IgE; asthma; allergic rhinitis;
KW   eczema; urticaria; atopic dermatitis; food allergy; CDR.
XX
OS   Unidentified.
XX
PN   WO2004070011-A2.
XX
PD   19-AUG-2004.
XX
PF   02-FEB-2004; 2004WO-US002894.
XX
PR   01-FEB-2003; 2003US-0444229P.
XX
PA   (TANO-) TANOX INC.
XX
PI   Singh S,  Foster C,  Wu H;
XX
DR   WPI; 2004-604433/58.
XX
PT   New high affinity human monoclonal antibodies, particularly those
PT   directed against isotypic determinants of immunoglobulin E, useful for
PT   asthma, allergic rhinitis, eczema, urticaria, atopic dermatitis, or a
PT   food allergy.
XX
PS   Claim 15; SEQ ID NO 60; 101pp; English.
XX
CC   The present invention relates to an antibody comprising a variable light
CC   chain region or a variable heavy chain region. The antibody and methods
CC   are useful for treating a disorder associated with an abnormally high IgE
CC   level, e.g. asthma, allergic rhinitis, eczema, urticaria, atopic
CC   dermatitis, or a food allergy. The present sequence represents an
CC   antibody region of clone Mab 136.
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 46
ADR31605
ID   ADR31605 standard; protein; 330 AA.
XX
AC   ADR31605;
XX
DT   04-NOV-2004  (first entry)
XX
DE   Human IgG1 CH1-3 protein.
XX
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KW   Antibody; diagnostic; prophylaxis; therapy; heavy chain constant region;
KW   CH; human; IgG1.
XX
OS   Homo sapiens.
XX
PN   WO2004070010-A2.
XX
PD   19-AUG-2004.
XX
PF   02-FEB-2004; 2004WO-US002892.
XX
PR   01-FEB-2003; 2003US-0444229P.
XX
PA   (TANO-) TANOX INC.
XX
PI   Singh S,  Foster C,  Wu H;
XX
DR   WPI; 2004-604432/58.
XX
PT   Generating a humanized, high affinity antibody from an antibody of
PT   interest comprises selecting a suitable human template as the framework
PT   for the H and L chain variable domains of the high affinity antibody to
PT   be made.
XX
PS   Example 11; SEQ ID NO 60; 100pp; English.
XX
CC   The invention relates to a method for generating a humanised high
CC   affinity antibody from an antibody of interest. The method involves
CC   selecting a suitable human template as the framework for the H (heavy)
CC   and L (light) chain variable (V) domains of the high affinity antibody to
CC   be made. The method is useful for generating high affinity antibodies
CC   useful in diagnostics, prophylaxis and treatment of diseases. The present
CC   sequence is human IgG1 CH (heavy chain constant region) protein.
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 47
ADS87909
ID   ADS87909 standard; protein; 330 AA.
XX
AC   ADS87909;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Anti-IFN-gamma antibody heavy chain constant region SEQ ID NO:2.
XX
KW   antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW   anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW   gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW   multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW   myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW   systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW   vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW   immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2004034988-A2.
XX
PD   29-APR-2004.
XX
PF   14-OCT-2003; 2003WO-US032678.
XX
PR   16-OCT-2002; 2002US-0419057P.
PR   17-JUN-2003; 2003US-0479241P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Welcher A,  Chute H,  Li L,  Huang H;
XX
DR   WPI; 2004-348323/32.
DR   N-PSDB; ADS87908.
XX
PT   New antibody that binds specifically to IFN-gamma and comprising a heavy
PT   chain CDR3, useful in preparing a composition for treating IFN-gamma
PT   mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or
PT   atherosclerosis.
XX
PS   Example 4; SEQ ID NO 2; 115pp; English.
XX
CC   The present invention describes an isolated antibody which binds
CC   specifically to interferon (IFN)-gamma and comprises a heavy chain
CC   complementarity determining region (CDR) 3 having a sequence comprising
CC   at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC   (ADS87943) in the same order and spacing, or an amino acid sequence of
CC   SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide
CC   encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC   disease; and (3) a composition comprising a carrier and the antibody. The
CC   IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC   HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC   antidiabetic activities, and can be used in gene therapy. The antibody is
CC   useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC   arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC   disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC   nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC   Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC   or haemolytic anaemia. The present sequence represents an immunoglobulin
CC   G1 (IgG1) anti-IFN-gamma heavy chain constant region, which is used in
CC   the exemplification of the present invention.
XX
SQ   Sequence 330 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 48
```

ADN33230
ID ADN33230 standard; protein; 330 AA.
XX
AC ADN33230;
XX
DT 18-NOV-2004 (first entry)
XX
DE IgG1-CH heavy chain constant region.
XX
KW IgG1-CH; antibody; IgG; heavy chain constant region;
KW FcRn binding affinity; asthma; autoimmune disease; cancer;
KW viral infection; antiasthmatic; immunosuppressive; cytostatic; virucide.
XX
OS Unidentified.
XX
PN WO2004035752-A2.
XX
PD 29-APR-2004.
XX
PF 15-OCT-2003; 2003WO-US033037.
XX
PR 15-OCT-2002; 2002US-0418972P.
PR 10-APR-2003; 2003US-0462014P.
PR 03-JUN-2003; 2003US-0475762P.
PR 29-AUG-2003; 2003US-0499048P.
XX
PA (PROT-) PROTEIN DESIGN LABS INC.
XX
PI Hinton PR, Tsurushita N, Tso YJ, Vasquez M;
XX
DR WPI; 2004-348446/32.
XX
PT New modified antibody of class IgG having an altered FcRn binding
PT affinity and/or serum half-life, useful in immunology and protein
PT engineering, and for diagnosing or treating asthma, autoimmune diseases,
PT cancer and viral infections.
XX
PS Disclosure; SEQ ID NO 3; 140pp; English.
XX
CC The invention relates to a modified antibody of class IgG where at least
CC one amino acid residue from the heavy chain constant region is different
CC from that present in an unmodified class IgG antibody, and where the FcRn
CC binding affinity and/or serum half-life of the modified antibody is
CC altered relative to that of the unmodified antibody. The methods and
CC compositions of the present invention are useful in the fields of
CC immunology and protein engineering, in particular for using modified
CC class IgG antibodies for diagnosing and treating asthma, autoimmune
CC diseases, cancer and viral infections. This sequence represents the
CC antibody IgG1-CH heavy chain constant region of the invention.
XX
SQ Sequence 330 AA;

Query Match 100.0%; Score 1263; DB 8; Length 330;
Best Local Similarity 100.0%; Pred. No. 2.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330

RESULT 49
ADS94906
ID ADS94906 standard; protein; 330 AA.
XX
AC ADS94906;
XX
DT 02-DEC-2004 (first entry)
XX
DE Anti-IFN-gamma antibody heavy chain constant region SEQ ID NO:2.
XX
KW antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS Homo sapiens.
XX
PN WO2004035747-A2.
XX
PD 29-APR-2004.
XX
PF 16-OCT-2003; 2003WO-US032871.
XX
PR 16-OCT-2002; 2002US-0419057P.
PR 17-JUN-2003; 2003US-0479241P.
XX
PA (AMGE-) AMGEN INC.
PA (MEDA-) MEDAREX INC.
XX
PI Welcher AA, Chute HT, Li Y, Huang H;
XX
DR WPI; 2004-348443/32.
DR N-PSDB; ADS94905.
XX
PT New human anti-interferon-gamma neutralizing antibodies for treating
PT interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,
PT diabetes, Grave's disease, psoriasis, atherosclerosis or transplant
PT rejection.
XX
PS Example 4; SEQ ID NO 2; 115pp; English.
XX
CC The present invention describes an isolated antibody which binds
CC specifically to interferon (IFN)-gamma and comprises a heavy chain
CC complementarity determining region (CDR) 3 having a sequence comprising
CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC (ADS94940) in the same order and spacing, or an amino acid sequence of
CC SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide
CC encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC disease; and (3) a composition comprising a carrier and the antibody. The
CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC antidiabetic activities, and can be used in gene therapy. The antibody is
CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC or haemolytic anaemia. The present sequence represents an immunoglobulin
CC G1 (IgG1) anti-IFN-gamma heavy chain constant region, which is used in
CC the exemplification of the present invention.
XX
SQ Sequence 330 AA;

Query Match 100.0%; Score 1263; DB 8; Length 330;
Best Local Similarity 100.0%; Pred. No. 2.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

```
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 50
AAY91106
ID   AAY91106 standard; protein; 331 AA.
XX
AC   AAY91106;
XX
DT   12-SEP-2003  (revised)
DT   15-SEP-2000  (first entry)
XX
DE   Human TR-Fc-delta-CH protein sequence SEQ ID NO:2.
XX
KW   Human; transferrin receptor; immunoglobulin G; IgG; chimeric;
KW   hTR-Fc-delta-CH; hTR-Fc-delta-H; immune response; immunosuppressant;
KW   cell surface molecule induced macrophage activation; antidiabetic;
KW   antiarthritic; dermatological; antiinflammatory; autoimmune disorder;
KW   diabetes; multiple sclerosis; rheumatoid arthritis;
KW   systemic lupus erythematosus.
XX
OS   Homo sapiens.
OS   Chimeric.
XX
PN   WO200024897-A1.
XX
PD   04-MAY-2000.
XX
PF   21-OCT-1999;   99WO-US024630.
XX
PR   26-OCT-1998;   98US-00178869.
XX
PA   (CYTO-) CYTOTHERAPEUTICS INC.
XX
PI   Tao W,  Wong S,  Hickey WF,  Hammang JP,  Baetge EE;
XX
DR   WPI; 2000-350739/30.
DR   N-PSDB; AAA53126.
XX
PT   Transformed cell containing a recombinant polynucleotide encoding an
PT   immunostimulatory cell surface polypeptide which induces removal of the
PT   cell when expressed, useful for treating various autoimmune diseases.
XX
PS   Example 1; Page 48-50; 64pp; English.
XX
CC   The present invention describes a transformed cell (C1) containing a
CC   recombinant polynucleotide (N1) comprising a promoter linked to a
CC   sequence encoding an immunostimulatory cell surface polypeptide (P1),
CC   where expression of P1 induces the removal of C1 from a host. C1
CC   expressing P1 induces macrophage activation, resulting in the rejection
CC   of the cell by a host. C1 expressing P1 is useful for treating various
CC   autoimmune disorders such as diabetes, multiple sclerosis, rheumatoid
CC   arthritis, systemic lupus erythematosus. The present sequence represents
CC   a human transferrin receptor and immunoglobulin G (IgG) heavy chain
CC   fragment chimeric protein, which is used in an example from the present
CC   invention. (Updated on 12-SEP-2003 to standardise OS field)
XX
SQ   Sequence 331 AA;

  Query Match             100.0%;  Score 1263;  DB 3;  Length 331;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         100 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 159

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         160 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 219

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         220 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 279

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         280 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 331


RESULT 51
ABU05197
ID   ABU05197 standard; protein; 331 AA.
XX
AC   ABU05197;
XX
DT   29-JAN-2003  (first entry)
XX
DE   Human expressed protein tag (EPT) #1863.
XX
KW   Translational profiling; expressed protein tag; EPT; kinase; phosphatase;
KW   protease; protease inhibitor; transporter; cytoskeletal protein;
KW   receptor; transcription factor; cancer; MHC;
KW   major histocompatability complex; myeloma; colon cancer; gastric cancer;
KW   adenocarcinoma; sarcoma; melanoma; lymphoma; leukaemia.
XX
OS   Homo sapiens.
XX
PN   WO200278524-A2.
XX
PD   10-OCT-2002.
XX
PF   28-MAR-2002; 2002WO-US009671.
XX
PR   28-MAR-2001; 2001US-0279495P.
PR   21-MAY-2001; 2001US-0292544P.
PR   08-AUG-2001; 2001US-0310801P.
PR   01-OCT-2001; 2001US-0326370P.
PR   04-DEC-2001; 2001US-0336780P.
PR   20-FEB-2002; 2002US-0358985P.
XX
PA   (ZYCO-) ZYCOS INC.
XX
PI   Chicz RM,  Tomlinson AJ,  Urban RG;
XX
DR   WPI; 2003-040607/03.
XX
PT   New polypeptides (e.g. kinases, phosphatases, proteases, transporters,
PT   cytoskeletal proteins, receptors or transcription factors), useful for
PT   treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
PT   leukemia.
XX
PS   Example 2; SEQ ID NO 1863; 134pp; English.
XX
CC   The invention describes a purified polypeptide, which comprises a
CC   fragment of a kinase, phosphatase, protease, protease inhibitor,
CC   transporter, cytoskeletal protein, receptor or transcription factor. The
CC   polypeptide is useful as an immunogenic composition for eliciting in a
CC   mammal an immunogenic response directed against any of the purified
CC   polypeptide. The purified polypeptide, or the antibody that binds to this
CC   polypeptide, is useful for treating cancer. The polypeptide is also
CC   useful for identifying compounds that binds to a naturally processed
CC   class I or class II MHC-binding polypeptide. The polypeptides and
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CC   polynucleotides are particularly useful for treating or preventing
CC   myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,
CC   lymphoma or leukaemia. These are also useful for screening agents for
CC   treating the above mentioned diseases. This sequence represents an
CC   expressed protein tag (EPT) isolated from human tissue for translational
CC   profiling. Note: This sequence does not appear in the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 331 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 331;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        100 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 159

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        160 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 219

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 279

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 331


RESULT 52
ADL35095
ID   ADL35095 standard; protein; 332 AA.
XX
AC   ADL35095;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human IgG1 (hOAT) kappa heavy chain constant domain protein SeqID 98.
XX
KW   antibody; variable domain; framework region; FR; huFR;
KW   immune system molecule; kappa; anti-tissue factor; hOAT; human.
XX
OS   Homo sapiens.
XX
PN   WO2004020579-A2.
XX
PD   11-MAR-2004.
XX
PF   06-AUG-2003; 2003WO-US024637.
XX
PR   29-AUG-2002; 2002US-00230880.
XX
PA   (SUNO-) SUNOL MOLECULAR CORP.
XX
PI   Wong HC,  Stinson JR,  Mosquera LA;
XX
DR   WPI; 2004-239169/22.
XX
PT   Producing humanized antibodies for diagnostic and therapeutic purposes
PT   comprises optimizing similarity between individual antibody framework
PT   regions to help identify human framework regions suitable for making the
PT   antibodies.
XX
PS   Disclosure; SEQ ID NO 98; 137pp; English.
XX
CC   This invention relates to a novel method for producing a humanised
CC   antibody variable (V) domain or its fragment by optimising sequence
CC   similarity between individual antibody framework regions (FRs) in order
CC   to identify suitable human FRs (huFRs). Specifically, it refers to novel
CC   immune system molecules i.e. humanised monoclonal antibodies that exhibit
CC   suitable binding affinity with reduced immunogenicity in humans. The
CC   present invention describes a method of mutagenising DNA of non-human FRs
CC   to encode humanised FRs having an amino acid sequence that is
CC   substantially identical to the selected human FR previously identified
CC   through sequence similarity searching. As such, this method provides
CC   humanised light or heavy chain V domains of the sequence huFR1-CDR1-huFR2
CC   -CDR2-huFR3-CDR3-huFR4, which can be used as therapeutic or diagnostic
CC   products to treat and/ or diagnose diseases in humans and animals.
CC   Furthermore, the method expands the number of best fit possibilities that
CC   can be generated and provides a rational basis for assembling nearly all
CC   humanised immune system molecules of interest. This polypeptide sequence
CC   is the human IgG1 kappa heavy chain constant domain protein of the
CC   invention.
XX
SQ   Sequence 332 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 332;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        101 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 160

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 220

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 280

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 332


RESULT 53
ADJ95912
ID   ADJ95912 standard; protein; 333 AA.
XX
AC   ADJ95912;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human IgG heavy chain constant region.
XX
KW   cytostatic; antibody therapy; immunoglobulin cassette construct;
KW   immunoglobulin leader molecule; immunoglobulin domain;
KW   immunoglobulin therapeutic molecule; monobody; cancer; immunoglobulin G;
KW   IgG; heavy chain constant region; human.
XX
OS   Homo sapiens.
XX
PN   US2004033561-A1.
XX
PD   19-FEB-2004.
XX
PF   17-OCT-2002; 2002US-00272899.
XX
PR   19-OCT-2001; 2001US-0350166P.
PR   26-JUN-2002; 2002US-0392364P.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   O'keefe TL,  Healey JJ,  Newman W,  Ponath PD,  Keyt BA;
XX
DR   WPI; 2004-180050/17.
DR   N-PSDB; ADJ95911.
XX
PT   New isolated nucleic acid molecules having an immunoglobulin cassette
PT   construct, useful for producing immunoglobulin therapeutic molecules
PT   termed monobodies, used as a therapeutic group in cancer disorders.
```

XX
PS Example 2; SEQ ID NO 8; 84pp; English.
XX
CC The invention describes an isolated nucleic acid molecule comprising an
CC immunoglobulin cassette construct, wherein the immunoglobulin cassette
CC comprises an immunoglobulin leader molecule operably linked to a stable
CC immunoglobulin domain region. The methods and compositions of the present
CC invention are useful for producing immunoglobulins, in particular
CC immunoglobulin therapeutic molecules termed monobodies, used as a
CC therapeutic group in cancer disorders. This is the amino acid sequence of
CC the human immunoglobulin G (IgG) heavy chain constant region used in the
CC creation of immunoglobulin DNA cassette constructs.
XX
SQ Sequence 333 AA;

Query Match 100.0%; Score 1263; DB 8; Length 333;
Best Local Similarity 100.0%; Pred. No. 2.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        102 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 161

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        162 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 221

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 281

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 333
```

RESULT 54
ADL22761
ID ADL22761 standard; protein; 333 AA.
XX
AC ADL22761;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human antibody heavy chain variable region.
XX
KW antibody; human; heavy chain variable region; therapeutic.
XX
OS Homo sapiens.
XX
PN WO2004013278-A2.
XX
PD 12-FEB-2004.
XX
PF 01-AUG-2003; 2003WO-KR001555.
XX
PR 02-AUG-2002; 2002KR-00045765.
PR 02-AUG-2002; 2002KR-00045767.
PR 02-AUG-2002; 2002KR-00045768.
XX
PA (YUHA-) YUHAN CORP.
XX
PI Lee J, Ko I, Song M, Kim C, Lee J, Yoo T, Kim J, Park S;
XX
DR WPI; 2004-157108/15.
DR N-PSDB; ADL22760.
XX
PT New expression vectors for an antibody heavy chain variable region,
PT lambda light chain variable region or kappa light chain variable region,
PT useful in developing therapeutic antibodies, e.g. humanized or chimeric
PT antibodies.
XX
PS Example 3; Page 34-35; 39pp; English.
XX
CC The present invention relates to an expression vector for an antibody
CC heavy chain variable region, a lambda light chain variable region or a
CC kappa light chain variable region. The expression vectors are useful in
CC the development of therapeutic antibodies, e.g. humanized or chimeric
CC antibodies. The present sequence is a human heavy chain variable region
CC of the invention.
XX
SQ Sequence 333 AA;

Query Match 100.0%; Score 1263; DB 8; Length 333;
Best Local Similarity 100.0%; Pred. No. 2.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        102 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 161

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        162 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 221

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 281

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 333
```

RESULT 55
AAR43685
ID AAR43685 standard; protein; 351 AA.
XX
AC AAR43685;
XX
DT 25-MAR-2003 (revised)
DT 25-MAY-1994 (first entry)
XX
DE Human kappa immunoglobulin light chain constant domain.
XX
KW Human; immunoglobulin; constant; region; humanised; P-selectin; light;
KW blocking; antibody; heavy; chain; variable; murine; thrombotic disease;
KW monoclonal; PB1.3; CDR; comlementarity determining region; leukocyte;
KW expression vector; coexpression; pHCMV-1748RHA-gammaiCi-dhfr; epitope;
KW pHCMV-1748RLA-KR-neo; PB1.3/Humanised version A; vascular endothelium;
KW pHCMV-1747CH-gammaCi-neo; pHCMV-1747-CL-KR-neo; PB1.3 chimera;
KW acute lung injury; ischaemia reperfusion injury; inflammation.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Domain 22. .119
FT /note= "CH1 domain"
FT Region 120. .134
FT /note= "Hinge region"
FT Domain 135. .244
FT /note= "CH2 domain"
FT Domain 245. .352
FT /note= "CH3 domain"
XX
PN WO9321956-A1.
XX
PD 11-NOV-1993.
XX
PF 04-MAY-1993; 93WO-US004274.
XX
PR 05-MAY-1992; 92US-00880196.
XX
PA (CYTE-) CYTEL CORP.
XX
PI Chestnut RW, Polley MJ, Paulson JC;

```
XX
DR   WPI; 1993-368423/46.
DR   N-PSDB; AAQ51547.
XX
PT   Anti-P-selectin antibody for ischaemia acute lung injury treatment -
PT   useful to treat inflammation and pathological conditions of intercellular
PT   adhesion by competitive inhibition assay.
XX
PS   Example 10; Fig 9; 82pp; English.
XX
CC   The sequences given in AAR43685-86 represent human immunoglobulin
CC   constant regions which were used in the production of the humanised P-
CC   selectin blocking antibody, along with the heavy and light chain variable
CC   region coding sequences of the murine monoclonal antibody PB1.3, given in
CC   AAR43687-88. The CDRs from PB1.3 heavy and light chains were substituted
CC   for the CDRs of human heavy and light chains. The humanised variable
CC   regions were inserted into expression vectors. By coexpression of
CC   appropriate combinations of heavy and light chains, several humanised
CC   antibodies can be expressed. Coexpression of pHCMV-1748RHA-gamma1Ci-dhfr
CC   and pHCMV-1748RLA-KR-neo gives rise to the PB1.3/Humanised version A.
CC   Coexpression of pHCMV-1747CH- gammaCi-neo and pHCMV-1747-CL-KR-neo gives
CC   rise to the PB1.3 chimera. These humanised antibodies selectively bind
CC   epitopes on P-selectin and block adhesion of leukocytes to the vascular
CC   endothelium. They may be used to treat inflammatory and thrombotic
CC   diseases and other pathological coditions involving P-selectin and
CC   antibodies to it, esp. acute lung injury and ischaemia reperfusion
CC   injury. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 351 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 351;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        120 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 179

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        180 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 239

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 299

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 351


RESULT 56
ADJ95976
ID   ADJ95976 standard; protein; 356 AA.
XX
AC   ADJ95976;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Immunoglobulin DNA cassette polypeptide seqid 72.
XX
KW   cytostatic; antibody therapy; immunoglobulin cassette construct;
KW   immunoglobulin leader molecule; immunoglobulin domain;
KW   immunoglobulin therapeutic molecule; monobody; cancer.
XX
OS   Synthetic.
XX
PN   US2004033561-A1.
XX
PD   19-FEB-2004.
XX
PF   17-OCT-2002; 2002US-00272899.
XX
PR   19-OCT-2001; 2001US-0350166P.
PR   26-JUN-2002; 2002US-0392364P.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   O'keefe TL,  Healey JJ,  Newman W,  Ponath PD,  Keyt BA;
XX
DR   WPI; 2004-180050/17.
DR   N-PSDB; ADJ95975.
XX
PT   New isolated nucleic acid molecules having an immunoglobulin cassette
PT   construct, useful for producing immunoglobulin therapeutic molecules
PT   termed monobodies, used as a therapeutic group in cancer disorders.
XX
PS   Disclosure; SEQ ID NO 72; 84pp; English.
XX
CC   The invention describes an isolated nucleic acid molecule comprising an
CC   immunoglobulin cassette construct, wherein the immunoglobulin cassette
CC   comprises an immunoglobulin leader molecule operably linked to a stable
CC   immunoglobulin domain region. The methods and compositions of the present
CC   invention are useful for producing immunoglobulins, in particular
CC   immunoglobulin therapeutic molecules termed monobodies, used as a
CC   therapeutic group in cancer disorders. This is the amino acid sequence of
CC   an immunoglobulin DNA cassette construct.
XX
SQ   Sequence 356 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 356;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        125 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 184

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        185 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 244

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 304

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 356


RESULT 57
ABP98040
ID   ABP98040 standard; protein; 358 AA.
XX
AC   ABP98040;
XX
DT   11-AUG-2003  (first entry)
XX
DE   Amino acid sequence of a human HE4a polypeptide.
XX
KW   Malignant condition; antibody; HE4a; antigen; adenocarcinoma;
KW   mesothelioma; ovarian carcinoma; pancreatic carcinoma;
KW   non-small cell lung carcinoma; HE4.
XX
OS   Homo sapiens.
XX
PN   WO2003021273-A2.
XX
PD   13-MAR-2003.
XX
PF   29-AUG-2002; 2002WO-EP009653.
XX
PR   29-AUG-2001; 2001US-0316537P.
XX
PA   (PACI-) PACIFIC NORTHWEST RES FOUND.
```

```
XX
PI   Schummer M,  Hellstrom I,  Hellstrom KE,  Ledbetter JA;
PI   Hayden-Ledbetter M;
XX
DR   WPI; 2003-300923/29.
DR   N-PSDB; ACC43451.
XX
PT   Screening malignancy, e.g. adenocarcinoma, in a subject by contacting
PT   sample of subject with antibody specific to HE4a antigen, and detecting
PT   the presence of soluble or cell surface form of HE4a antigen.
XX
PS   Claim 40; Page 79-80; 85pp; English.
XX
CC   The specification describes a method of screening for the presence of a
CC   malignant condition in a subject. The method involves contacting a
CC   biological sample from the subject with an antibody specific for the HE4a
CC   antigen to determine the presence of a molecule naturally occurring in
CC   soluble form and having an antigenic determinant that is reactive with
CC   the antibody. Binding of the antibody to the antigenic determinant is
CC   determined to detect the malignant condition. The method is useful for
CC   screening for the presence of a malignant condition e.g. adenocarcinoma,
CC   mesothelioma, ovarian carcinoma, pancreatic carcinoma and non-small cell
CC   lung carcinoma. The antibody is useful for treating a malignant
CC   condition. The present sequence represents human HE4a. HE4a refers to the
CC   soluble and cell surface form of HE4
XX
SQ   Sequence 358 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 358;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        127 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 186

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        187 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 246

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 306

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 358


RESULT 58
ADF73150
ID   ADF73150 standard; protein; 367 AA.
XX
AC   ADF73150;
XX
DT   26-FEB-2004  (first entry)
XX
DE   RELP-Fc fusion protein amino acid sequence SEQ ID NO:9.
XX
KW   anti-RELP fusion antibody; RELP fusion antibody; cytostatic;
KW   cardiovascular; immunomodulator; neuroprotective; nootropic;
KW   gene therapy; cancer; immune disorder; cardiovascular disorder;
KW   neurological disorder; human.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO2003102017-A2.
XX
PD   11-DEC-2003.
XX
PF   02-JUN-2003; 2003WO-US017357.
XX
PR   03-JUN-2002; 2002US-0385305P.
XX
PA   (CENZ ) CENTOCOR INC.
XX
PI   Carton J,  Giles-Komar J,  Scallon B,  Staquet K;
XX
DR   WPI; 2004-053426/05.
DR   N-PSDB; ADF73151.
XX
PT   New mammalian Reg like protein (RELP) fusion antibody, useful for
PT   preparing a composition for diagnosing or treating a RELP protein-related
PT   condition in a cell, tissue, organ or animal, e.g., cancer.
XX
PS   Example 2; SEQ ID NO 9; 78pp; English.
XX
CC   The present invention describes a mammalian anti-RELP fusion antibody (I)
CC   which comprises: (a) at least one heavy chain variable region comprising
CC   ADF73148 or ADF73168 and at least one light chain variable region
CC   comprising ADF73149, ADF73169 or ADF73180; or (b) all of the
CC   complimentarity determining regions (CDRs) of ADF73142 to ADF73147 or
CC   ADF73162 to ADF73167. Also described: (1) a pharmaceutical composition
CC   comprising the mammalian RELP fusion antibody and at a carrier or diluent
CC   ; (2) an isolated nucleic acid encoding the mammalian RELP fusion
CC   antibody; (3) an isolated nucleic acid vector comprising the isolated
CC   nucleic acid; (4) a prokaryotic or eukaryotic host cell comprising the
CC   isolated nucleic acid; (5) a method for producing at least one RELP
CC   fusion antibody; (6) a method for diagnosing or treating a RELP protein-
CC   related condition in a cell, tissue, organ or animal; (7) an article of
CC   manufacture for human pharmaceutical or diagnostic use, comprising
CC   packaging material and a container comprising a solution or a lyophilised
CC   form of the mammalian RELP fusion antibody; and (8) a medical device,
CC   comprising the isolated mammalian KELP fusion antibody, where the device
CC   is suitable to contacting or administering the at least one RELP fusion
CC   antibody. (I) has cytostatic, cardiovascular, immunomodulator,
CC   neuroprotective and nootropic activities, and can be used in gene
CC   therapy. The mammalian RELP fusion antibody is useful for preparing a
CC   composition for diagnosing or treating a RELP protein-related condition
CC   in a cell, tissue, organ or animal, e.g., cancer, immune disorders,
CC   cardiovascular and neurological disorders. The present sequence is used
CC   in the exemplification of the present invention.
XX
SQ   Sequence 367 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 367;
  Best Local Similarity   100.0%;  Pred. No. 2.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        136 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 195

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        196 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 255

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        256 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 315

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        316 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 367


RESULT 59
AAP91918
ID   AAP91918 standard; protein; 371 AA.
XX
AC   AAP91918;
XX
DT   25-MAR-2003  (revised)
DT   31-OCT-2002  (revised)
DT   14-MAY-1990  (first entry)
```

```
XX
DE   Sequence of the linkered immunoglobulin gamma chain fragment.
XX
KW   Immunoglobulin gamma chain; IgG1 heavy chain constant region.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 42. .43
FT                   /note= "Insert site"
FT   Misc-difference 144. .145
FT                   /note= "Insert site"
XX
PN   EP314317-A.
XX
PD   03-MAY-1989.
XX
PF   03-OCT-1988;   88EP-00309194.
XX
PR   02-OCT-1987;   87US-00104329.
PR   28-SEP-1988;   88US-00250785.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Capon DJ,  Gregrory TJ;
XX
DR   WPI; 1989-131855/18.
DR   N-PSDB; AAN90779.
XX
PT   Compsns. contg. adheson variants - useful in therapy and diagnostics,
PT   e.g. CD4 variants which are therapeutically useful for treating human
PT   immuno-deficiency virus.
XX
PS   Disclosure; Fig 4a-4b; 36pp; English.
XX
CC   It may be fused to the first 180 N-terminal residues of CD4 at the C-
CC   terminus. The fusion protein may be used for antiviral of
CC   immunomodulatory therapy particularly in treatment of HIV infection.
CC   (Updated on 31-OCT-2002 to add missing OS field.) (Updated on 25-MAR-2003
CC   to correct PR field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 371 AA;

  Query Match             100.0%;  Score 1263;  DB 1;  Length 371;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 199

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 319

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        320 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 371


RESULT 60
AAP93558
ID   AAP93558 standard; protein; 371 AA.
XX
AC   AAP93558;
XX
DT   25-MAR-2003  (revised)
DT   06-JUN-1990  (first entry)
XX
DE   Linkered human IgG1 (gamma 1) chain fragment.
XX
KW   Human IgG1; gamma 1; immunoglobulin; CD4; fusion protein.
XX
OS   Homo sapiens.
XX
PN   WO8902922-A.
XX
PD   06-APR-1989.
XX
PF   03-OCT-1988;   88WO-US003414.
XX
PR   02-OCT-1987;   87US-00104329.
PR   28-SEP-1988;   88US-00250785.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Capon DJ,  Gregory TJ;
XX
DR   WPI; 1989-114397/15.
DR   N-PSDB; AAN90736.
XX
PT   New nucleic acid sequences encoding adheson, esp. CD 4, variants -
PT   partic. with trans-membrane domain inactivated or fused to other peptide,
PT   useful esp. for treating HIV infections.
XX
PS   Fig 4A-4B2; pp. 10/13-12/13; 78pp; English.
XX
CC   It is employed in the prepn. of CD4 fusions. CD4 fusion proteins can have
CC   antiviral and immunomodulatory activity and are esp. useful for treating
CC   HIV infections, regardless of genetic variation within the virus. They
CC   and antibodies raised against them can also be used diagnostically for
CC   assaying adhesons and their ligands. (Updated on 25-MAR-2003 to correct
CC   PR field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 371 AA;

  Query Match             100.0%;  Score 1263;  DB 1;  Length 371;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 199

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 319

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        320 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 371


RESULT 61
AAW60037
ID   AAW60037 standard; protein; 376 AA.
XX
AC   AAW60037;
XX
DT   11-SEP-1998  (first entry)
XX
DE   Antigenic peptide hFas (nd29) containing Fc region.
XX
KW   Fas ligand; Fas antagonist; apoptosis related disease; liver disease;
KW   heart failure; kidney failure; graft-versus-host disease; antibody;
KW   myocardial infarction; ischemic restenosis; endotoxic shock.
XX
OS   Homo sapiens.
```

```
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .16
FT                   /note= "hFas antigen signal peptide"
FT   Protein         30. .376
FT                   /note= "hFas (nd29) protein"
XX
PN   WO9818487-A1.
XX
PD   07-MAY-1998.
XX
PF   31-OCT-1997;   97WO-JP003978.
XX
PR   31-OCT-1996;   96JP-00290459.
PR   27-DEC-1996;   96JP-00351718.
PR   26-SEP-1997;   97JP-00262521.
XX
PA   (MOCH ) MOCHIDA PHARM CO LTD.
PA   (OSAB-) OSAKA BIOSCIENCE INST.
XX
PI   Nagata S,  Yatomi T,  Suda T;
XX
DR   WPI; 1998-271925/24.
DR   N-PSDB; AAV34430.
XX
PT   Use of Fas antagonist for treatment and prevention of apoptosis-related
PT   diseases - such as heart or kidney failure, graft-versus-host disease or
PT   liver disease.
XX
PS   Example; Fig 5-9; 86pp; Japanese.
XX
CC   This represents the antigenic peptide hFas (nd29) containing the Fc
CC   region. The invention provides the use of Fas antagonist as an agent for
CC   the treatment and prevention of apoptosis-related diseases. The Fas
CC   antagonist can be a partial Fas antigen peptide containing the
CC   extracellular part of the protein, but lacking the signal sequence, an
CC   anti-Fas antibody, or an anti-Fas ligand antibody, where the antibody is
CC   preferably a humanised antibody. The Fas antagonist is used in the
CC   treatment and prevention of diseases such as myocardial infarction, heart
CC   failure, ischemic heart disease, acute kidney failure, graft-versus-host
CC   disease, ischemic restenosis of the heart, liver or kidney, and endotoxic
CC   shock, and also as an organ preservative in transplantation. The agent is
CC   of low toxicity but effectively inhibits the Fas/Fas ligand system
XX
SQ   Sequence 376 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 376;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        145 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 204

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        205 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 264

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        265 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 324

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        325 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 376


RESULT 62
ABJ37105
ID   ABJ37105 standard; protein; 377 AA.
XX
AC   ABJ37105;
XX
DT   08-MAY-2003  (first entry)
XX
DE   Concatameric immunoadhesion human protein sequence SEQ ID No 16.
XX
KW   Antiinflammatory; antibacterial; immunosuppressive; antirheumatic;
KW   antiarthritic; immunomodulator; concatameric protein; soluble domain;
KW   dimeric protein; inflammation; septicaemia; cytotoxicity;
KW   rheumatoid arthritis; cachexia; inflammation; human.
XX
OS   Homo sapiens.
XX
PN   WO2003010202-A1.
XX
PD   06-FEB-2003.
XX
PF   26-JUL-2002; 2002WO-KR001427.
XX
PR   26-JUL-2001; 2001KR-00045028.
XX
PA   (MEDE-) MEDEXGEN CO LTD.
XX
PI   Chung Y,  Han J,  Lee H,  Choi E,  Kim J;
XX
DR   WPI; 2003-229639/22.
DR   N-PSDB; ABT32048.
XX
PT   New concatameric protein having two soluble domains, useful for
PT   diagnosing and treating disorders associated with the dimeric protein or
PT   its glycosylated form, such as inflammation, septicemia, rheumatoid
PT   arthritis and cachexia.
XX
PS   Disclosure; Page 162-164; 211pp; English.
XX
CC   The invention relates to a novel concatameric protein comprising two
CC   soluble domains, in which an N-terminus of a soluble domain of a
CC   biologically active protein is linked to a C-terminus of an identical
CC   soluble domain or a different soluble domain of a biologically active
CC   protein. The methods and compositions of the present invention are useful
CC   for the diagnosis and treatment of disorders associated with dimeric
CC   protein or its glycosylated form, such as inflammation, septicaemia,
CC   cytotoxicity, rheumatoid arthritis, cachexia and other inflammation-
CC   related diseases. This sequence represents the human concatameric protein
CC   of the invention
XX
SQ   Sequence 377 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 377;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        146 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 205

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 265

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 325

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 377


RESULT 63
ADQ79914
ID   ADQ79914 standard; protein; 377 AA.
XX
AC   ADQ79914;
XX
```

```
DT   09-SEP-2004  (first entry)
XX
DE   Human CTLA4/Ig construct.
XX
KW   Human; tumour necrosis factor receptor; TNFR1; TNFR2; CTLA4; CD2; IgG;
KW   immunoglobulin; concatameric fused dimer protein; immunoadhesin;
KW   Fc fragment; hinge.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   KR2004009997-A.
XX
PD   31-JAN-2004.
XX
PF   26-JUL-2002; 2002KR-00045921.
XX
PR   26-JUL-2002; 2002KR-00045921.
XX
PA   (MEDE-) MEDEXGEN INC.
XX
PI   Choi EY,  Han JU,  Jung YH,  Kim JM,  Lee HJ;
XX
DR   WPI; 2004-458871/43.
DR   N-PSDB; ADQ79913.
XX
PT   Concatameric immunoadhesin.
XX
PS   Example 2; SEQ ID NO 16; 129pp; Korean.
XX
CC   The invention relates to a concatameric fused dimer protein and
CC   glycosylation modification protein providing concatameric immunoadhesin
CC   with improved efficacy and stability. The concatameric protein is
CC   characteristically formed by binding C-terminal of one biologically
CC   active protein with N-terminal of same or different biologically active
CC   protein, e.g. tumour necrosis factor receptors (TNFR1 and TNFR2), CD2 and
CC   CTLA4. Two monomer proteins which are formed by fusing the extracellular
CC   region of a protein participating in the same immune reaction to an
CC   immunoglobulin Fc fragment, bound together at a hinge region by
CC   disulphide bond to give the concatameric fused dimer protein, wherein the
CC   immunoglobulin is IgG. The present sequence represents a monomeric or
CC   dimeric IgG fusion protein (or a dimeric fusion protein containing
CC   engineered N-glycosylation sites, designated "mg").
XX
SQ   Sequence 377 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 377;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        146 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 205

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 265

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 325

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 377


RESULT 64
AAW49073
ID   AAW49073 standard; protein; 379 AA.
XX
AC   AAW49073;
XX
DT   18-NOV-1998  (first entry)
XX
DE   Recombinant human MetFc-OB protein.
XX
KW   Recombinant human MetFc-OB protein; chimeric; immunoglobulin; diabetes;
KW   high blood lipid level; arterial sclerosis; stroke; Fc-OB fusion protein.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Protein         2. .379
FT                   /note= "Recombinant human Fc-OB protein"
FT   Region          234. .379
FT                   /note= "Human OB protein"
XX
PN   WO9828427-A1.
XX
PD   02-JUL-1998.
XX
PF   11-DEC-1997;   97WO-US023183.
XX
PR   20-DEC-1996;   96US-00770973.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Mann MB,  Hecht RI;
XX
DR   WPI; 1998-377658/32.
DR   N-PSDB; AAV32900.
XX
PT   New fusion proteins of OB and Fc - used for treating e.g. excess weight,
PT   diabetes, arterial sclerosis, arterial plaque, high blood lipid level,
PT   gall stones or stroke.
XX
PS   Claim 2; Fig 3A-3C; 107pp; English.
XX
CC   The present sequence represents a recombinant human MetFc-OB fusion
CC   protein. The invention provides Fc-OB fusion proteins whereby the Fc
CC   region of an immunoglobulin or its analogue is linked, either directly or
CC   indirectly using a linker, to the N-terminus of an OB protein or its
CC   analogue. The Fc-OB fusion proteins are claimed to demonstrate increased
CC   stability and clearance rate and decreased degradation as compared to OB
CC   protein or a fusion of Fc to the C-terminus of the OB protein. These Fc-
CC   OB fusion proteins are also claimed to be useful for treating excess
CC   weight in an individual or animal or for treating co-morbidities
CC   associated with excess fat such as diabetes, high blood lipid level,
CC   arterial sclerosis and stroke
XX
SQ   Sequence 379 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 379;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          2 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 61

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 121

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 181

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 233


RESULT 65
```

```
AAW83962
ID   AAW83962 standard; protein; 379 AA.
XX
AC   AAW83962;
XX
DT   15-FEB-1999  (first entry)
XX
DE   Recombinant human metFc-OB protein.
XX
KW   Recombinant; metFc-OB protein; Fc region; immunoglobulin; Ig; OB;
KW   obesity; human; adiposity; blood lipid; diabetes type II; insulin;
KW   hypoglycaemic; antihypertensive; diuretic; appetite suppressant;
KW   suspension.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 5
FT                   /note= "can be optionally replaced with Ala"
FT   Misc-difference 20
FT                   /note= "can be optionally replaced with Glu"
FT   Misc-difference 103
FT                   /note= "can be optionally replaced with Ala"
FT   Misc-difference 105
FT                   /note= "can be optionally replaced with Ala"
FT   Misc-difference 107
FT                   /note= "can be optionally replaced with Ala"
XX
PN   WO9846257-A1.
XX
PD   22-OCT-1998.
XX
PF   16-APR-1998;   98WO-US007828.
XX
PR   17-APR-1997;   97US-00843971.
PR   14-APR-1998;   98US-00059467.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Brems DN,  French DL,  Speed MA;
XX
DR   WPI; 1998-594525/50.
DR   N-PSDB; AAV69685.
XX
PT   Concentrated suspension of fusion of obesity protein with Fc
PT   immunoglobulin fragment - stable at physiological pH, used for e.g.
PT   reduction of weight and blood lipid levels, and for treatment of type II
PT   diabetes.
XX
PS   Claim 2; Fig 5A-C; 47pp; English.
XX
CC   This represents a recombinant metFc-OB protein which consists of an Fc
CC   region of human immunoglobulin (Ig) fused to a human OB (obesity)
CC   protein. The invention provides a human OB protein suspension that
CC   contains at least 0.5 mg/ml of the human OB protein derivatised by
CC   attachment of the Fc region of an Ig to the N-terminus of OB, and has a
CC   pH 6-8. The suspensions are used to reduce weight, adiposity and blood
CC   lipid levels, to treat or prevent diabetes type II, and to increase lean
CC   mass and insulin sensitivity. They may be used in conjunction with
CC   insulin, hypoglycaemics, antihypertensives, diuretics, appetite
CC   suppressants etc. These suspensions are stable and active at
CC   physiological pH and are ready-for-use formulations that do not require
CC   freezing or freeze drying. As they are very concentrated, only small
CC   volumes are required and they provide a sustained-release effect, with
CC   increased potency and reduced frequency of injection
XX
SQ   Sequence 379 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 379;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          2 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 61

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 121

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 181

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 233


RESULT 66
ABB07681
ID   ABB07681 standard; protein; 388 AA.
XX
AC   ABB07681;
XX
DT   10-JUN-2002  (first entry)
XX
DE   MOG-Fc fusion protein.
XX
KW   B-cell; autoreactive antigen; immunoglobulin receptor; blood cell;
KW   complement system; MOG; MOG-Fc; fusion protein; auto-antigen; muscular;
KW   immunosuppressive; dermatological; nephrotropic; antianemic; antithyroid;
KW   antirheumatic; antiarthritic; antiinflammatory; antidiabetic; vasotropic;
KW   thyromimetic; neuroprotective; haemostatic; gastrointestinal;
KW   antiallergic; gene therapy.
XX
OS   Homo sapiens.
XX
PN   WO200216414-A2.
XX
PD   28-FEB-2002.
XX
PF   22-AUG-2001; 2001WO-EP009714.
XX
PR   22-AUG-2000; 2000EP-00117354.
XX
PA   (MICR-) MICROMET AG.
XX
PI   Zocher M,  Baeuerle P,  Dreier T;
XX
DR   WPI; 2002-257905/30.
DR   N-PSDB; ABA95203.
XX
PT   Composition, useful for selective elimination of autoreactive B cells in
PT   treatment and prevention of autoimmune diseases, comprises (poly)peptide
PT   construct containing effector molecule and autoreactive antigen.
XX
PS   Claim 21; Page 93-95; 96pp; English.
XX
CC   The invention provides a composition for the selective elimination of
CC   autoreactive B-cells comprising at least one (poly)peptide construct
CC   containing: (a) an autoreactive antigen or its fragment specifically
CC   recognized by the immunoglobulin receptors of the B-cells; and (b) an
CC   effector molecule capable of interacting with and/or activating blood
CC   cells, natural killer (NK)-cells, T-cells, macrophages, monocytes and/or
CC   granulocytes and/or capable of activating the complement system. The
CC   compositions are useful for the selective elimination of autoreactive B
CC   cells, selective reduction of autoreactive immunoglobulins and for the
CC   treatment and prevention of autoimmune diseases e.g. pemphigus vulgaris,
CC   bullous pemphigoid, Goodpasture's syndrome, autoimmune hemolytic anemia,
CC   rheumatoid arthritis, systemic lupus erythematosus (SLE), Graves'
CC   disease, contact dermatitis, myasthenia gravis, juvenile diabetes,
CC   Sjoegren's syndrome, autoimmune thyroiditis, Addison's disease, multiple
CC   sclerosis, thrombocytopenic purpura, pemphigus foliaceous and celiac
CC   disease. The present sequence represents the amino acid sequence of the
CC   construct comprising the MOG-Fc fusion protein where MOG is the auto-
```

CC antigen
XX
SQ Sequence 388 AA;

Query Match 100.0%; Score 1263; DB 5; Length 388;
Best Local Similarity 100.0%; Pred. No. 2.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 157 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 216

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 217 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 276

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 277 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 336

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 337 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 388

RESULT 67
ADA14289
ID ADA14289 standard; protein; 388 AA.
XX
AC ADA14289;
XX
DT 06-NOV-2003 (first entry)
XX
DE Mutated MOG-Fc construct protein SEQ ID NO:28.
XX
KW polypeptide construct; autoreactive antigen; immunoglobulin receptor;
KW Ig receptor; autoreactive B-cell; autoimmune disease; immunosuppressive;
KW neuroprotective; dermatological; antiarthritic; antithyroid;
KW antidiabetic; hepatotropic; gene therapy; Pemphigus vulgaris;
KW Bullous pemphigoid; Goodpasture's syndrome;
KW autoimmune haemolytic anaemia; AIHA; rheumatoid arthritis;
KW Systemic Lupus erythematosus; Grave's disease;
KW autoimmune hyperthyroidism; contact dermatitis; Myasthenia gravis;
KW juvenile diabetes; Sjogren's syndrome; autoimmune thyroiditis;
KW primary hypoadrenalism; Addison's disease; multiple sclerosis;
KW thrombocytopenic purpura; pemphigus fallacious; linear IgA dermatosis;
KW celiac disease; human; MOG; mutant; MOG-Fc.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003068822-A2.
XX
PD 21-AUG-2003.
XX
PF 12-FEB-2003; 2003WO-EP001389.
XX
PR 13-FEB-2002; 2002EP-00003332.
XX
PA (MICR-) MICROMET AG.
XX
PI Zocher M, Dreier T, Baeuerle P;
XX
DR WPI; 2003-663797/62.
DR N-PSDB; ADA14288.
XX
PT New polypeptide construct, useful for preparing a composition for
PT treating or preventing autoimmune diseases e.g. rheumatoid arthritis,
PT contact dermatitis or multiple sclerosis.
XX
PS Example 18; Page 139-141; 141pp; English.
XX
CC The present invention describes a polypeptide construct (I) comprising at
CC least two domains or two sets of domains. The domain comprises a de-
CC immunised, autoreactive antigen or its fragment that is specifically
CC recognised by the immunoglobulin (Ig) receptors of autoreactive B-cells.
CC A further domain comprises an effector molecule capable of interacting
CC with or activating NK-cells, T-cells, macrophages, monocytes or
CC granulocytes or capable of activating the complement system. Also
CC described: (1) a polynucleotide encoding (I); (2) a vector comprising the
CC polynucleotide of (1); (3) a host transformed with the vector of (2); (4)
CC a composition comprising (I), polynucleotide of (1), vector of (2) or
CC host of (3); and (5) treating or preventing autoimmune disease. (I) has
CC immunosuppressive, neuroprotective, dermatological, antiarthritic,
CC antithyroid, antidiabetic and hepatotropic activities, and can be used in
CC gene therapy. The polypeptide construct is useful for preparing a
CC composition for treating or preventing autoimmune diseases comprising
CC Pemphigus vulgaris, Bullous pemphigoid, Goodpasture's syndrome,
CC autoimmune haemolytic anaemia (AIHA), rheumatoid arthritis, Systemic
CC Lupus erythematosus, Grave's disease (autoimmune hyperthyroidism),
CC contact dermatitis, Myasthenia gravis, juvenile diabetes, Sjogren's
CC syndrome, autoimmune thyroiditis, primary hypoadrenalism (Addison's
CC disease), multiple sclerosis, thrombocytopenic purpura, pemphigus
CC fallacious, linear IgA dermatosis and celiac disease. The present
CC sequence represents a mutated MOG-Fc construct, which is used in an
CC example from the present invention.
XX
SQ Sequence 388 AA;

Query Match 100.0%; Score 1263; DB 6; Length 388;
Best Local Similarity 100.0%; Pred. No. 2.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 157 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 216

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 217 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 276

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 277 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 336

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 337 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 388

RESULT 68
ADA14265
ID ADA14265 standard; protein; 388 AA.
XX
AC ADA14265;
XX
DT 06-NOV-2003 (first entry)
XX
DE Human immunoglobulin G1 (IgG1) protein SEQ ID NO:4.
XX
KW polypeptide construct; autoreactive antigen; immunoglobulin receptor;
KW Ig receptor; autoreactive B-cell; autoimmune disease; immunosuppressive;
KW neuroprotective; dermatological; antiarthritic; antithyroid;
KW antidiabetic; hepatotropic; gene therapy; Pemphigus vulgaris;
KW Bullous pemphigoid; Goodpasture's syndrome;
KW autoimmune haemolytic anaemia; AIHA; rheumatoid arthritis;
KW Systemic Lupus erythematosus; Grave's disease;
KW autoimmune hyperthyroidism; contact dermatitis; Myasthenia gravis;
KW juvenile diabetes; Sjogren's syndrome; autoimmune thyroiditis;
KW primary hypoadrenalism; Addison's disease; multiple sclerosis;
KW thrombocytopenic purpura; pemphigus fallacious; linear IgA dermatosis;
KW celiac disease; human; IgG1.
XX
OS Homo sapiens.
XX
PN WO2003068822-A2.

```
XX
PD   21-AUG-2003.
XX
PF   12-FEB-2003; 2003WO-EP001389.
XX
PR   13-FEB-2002; 2002EP-00003332.
XX
PA   (MICR-) MICROMET AG.
XX
PI   Zocher M,  Dreier T,  Baeuerle P;
XX
DR   WPI; 2003-663797/62.
DR   N-PSDB; ADA14264.
XX
PT   New polypeptide construct, useful for preparing a composition for
PT   treating or preventing autoimmune diseases e.g. rheumatoid arthritis,
PT   contact dermatitis or multiple sclerosis.
XX
PS   Example 3; Page 131-133; 141pp; English.
XX
CC   The present invention describes a polypeptide construct (I) comprising at
CC   least two domains or two sets of domains. The domain comprises a de-
CC   immunised, autoreactive antigen or its fragment that is specifically
CC   recognised by the immunoglobulin (Ig) receptors of autoreactive B-cells.
CC   A further domain comprises an effector molecule capable of interacting
CC   with or activating NK-cells, T-cells, macrophages, monocytes or
CC   granulocytes or capable of activating the complement system. Also
CC   described: (1) a polynucleotide encoding (I); (2) a vector comprising the
CC   polynucleotide of (1); (3) a host transformed with the vector of (2); (4)
CC   a composition comprising (I), polynucleotide of (1), vector of (2) or
CC   host of (3); and (5) treating or preventing autoimmune disease. (I) has
CC   immunosuppressive, neuroprotective, dermatological, antiarthritic,
CC   antithyroid, antidiabetic and hepatotropic activities, and can be used in
CC   gene therapy. The polypeptide construct is useful for preparing a
CC   composition for treating or preventing autoimmune diseases comprising
CC   Pemphigus vulgaris, Bullous pemphigoid, Goodpasture's syndrome,
CC   autoimmune haemolytic anaemia (AIHA), rheumatoid arthritis, Systemic
CC   Lupus erythematosus, Grave's disease (autoimmune hyperthyroidism),
CC   contact dermatitis, Myasthenia gravis, juvenile diabetes, Sjogren's
CC   syndrome, autoimmune thyroiditis, primary hypoadrenalism (Addison's
CC   disease), multiple sclerosis, thrombocytopenic purpura, pemphigus
CC   fallacious, linear IgA dermatosis and celiac disease. The present
CC   sequence represents a human immunoglobulin G1 (IgG1) protein, which is
CC   used in an example from the present invention.
XX
SQ   Sequence 388 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 388;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        157 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 216

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        217 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 276

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        277 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 336

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        337 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 388


RESULT 69
AAW18574
ID   AAW18574 standard; protein; 396 AA.
XX
AC   AAW18574;
XX
DT   27-AUG-2003  (revised)
DT   17-SEP-1997  (first entry)
XX
DE   Aggrecanase artificial recombinant substrate rAGG-1.
XX
KW   Artificial recombinant substrate; rAGG1; aggrecanase; aggrecan;
KW   osteoarthritis; diagnosis.
XX
OS   Homo sapiens.
OS   Chimaeric.
OS   Chimeric.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .24
FT                   /label= Sig_peptide
FT                   /note= "CD5 signal sequence"
FT   Peptide         25. .32
FT                   /label= FLAG
FT   Domain          33. .160
FT                   /label= Aggrecan
FT                   /note= "human aggrecan interglobular domain"
FT   Peptide         161. .164
FT                   /label= Spacer
FT   Region          165. .179
FT                   /label= Hinge
FT                   /note= "human IgG1 hinge region"
FT   Region          180. .289
FT                   /label= CH2
FT                   /note= "human IgG1 CH2 region"
FT   Region          290. .396
FT                   /label= CH3
FT                   /note= "human IgG1 CH3 region"
XX
PN   EP785274-A1.
XX
PD   23-JUL-1997.
XX
PF   27-DEC-1996;   96EP-00120949.
XX
PR   18-JAN-1996;   96EP-00100682.
XX
PA   (FARH ) HOECHST AG.
XX
PI   Bartnik E,  Eidenmueller B,  Buettner F,  Caterson B,  Hughes C;
XX
DR   WPI; 1997-365948/34.
DR   N-PSDB; AAT69892.
XX
PT   Recombinant substrate for aggrecanase in vitro testing - and encoding
PT   DNA, useful for studying aggrecanase activity e.g. by detection of
PT   cleavage products for monitoring onset or progression of osteoarthritis.
XX
PS   Claim 3; Page 15-16; 28pp; English.
XX
CC   An artificial recombinant substrate, rAGG-1 (AAW18574), for aggreganase
CC   comprises the CD5 signal sequence, a FLAG epitope for M1 monoclonal
CC   antibody detection, the interglobular domain of human aggrecan, and human
CC   IgG1 hinge, CH2 and CH3 regions. It is the expression product of a DNA
CC   molecule (AAT69892) that can be incorporated into a vector for use in
CC   rAGG-1 prodn. in host cells. rAGG-1 can be used in cell culture systems
CC   to study the activity of aggrecanase, to detect new enzymatic cleavage
CC   sites, for the affinity purification of aggrecanase, to isolate
CC   aggrecanase cDNA by functional cloning, to screen for aggrecanase
CC   inhibitors, in methods for monitoring the onset or progression of
CC   osteoarthritis, and in diagnostic aids. Another rAGG-1 (AAW18575) has
CC   alanine at amino acid position 34. (Updated on 27-AUG-2003 to correct OS
CC   field.)
XX
SQ   Sequence 396 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 396;
```

```
  Best Local Similarity   100.0%;  Pred. No. 2.9e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        165 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 224

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        225 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        345 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 396


RESULT 70
AAW18575
ID   AAW18575 standard; protein; 396 AA.
XX
AC   AAW18575;
XX
DT   27-AUG-2003  (revised)
DT   17-SEP-1997  (first entry)
XX
DE   Aggrecanase artificial recombinant substrate rAGG-1.
XX
KW   Artificial recombinant substrate; rAGG1; aggrecanase; aggrecan;
KW   osteoarthritis; diagnosis.
XX
OS   Homo sapiens.
OS   Chimaeric.
OS   Chimeric.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .24
FT                   /label= Sig_peptide
FT                   /note= "CD5 signal sequence"
FT   Peptide         25. .32
FT                   /label= FLAG
FT   Domain          33. .160
FT                   /label= Aggrecan
FT                   /note= "human aggrecan interglobular domain"
FT   Peptide         161. .164
FT                   /label= Spacer
FT   Region          165. .179
FT                   /label= Hinge
FT                   /note= "human IgG1 hinge region"
FT   Region          180. .289
FT                   /label= CH2
FT                   /note= "human IgG1 CH2 region"
FT   Region          290. .396
FT                   /label= CH3
FT                   /note= "human IgG1 CH3 region"
XX
PN   EP785274-A1.
XX
PD   23-JUL-1997.
XX
PF   27-DEC-1996;   96EP-00120949.
XX
PR   18-JAN-1996;   96EP-00100682.
XX
PA   (FARH ) HOECHST AG.
XX
PI   Bartnik E,  Eidenmueller B,  Buettner F,  Caterson B,  Hughes C;
XX
DR   WPI; 1997-365948/34.
DR   N-PSDB; AAT69893.
XX
PT   Recombinant substrate for aggrecanase in vitro testing - and encoding
PT   DNA, useful for studying aggrecanase activity e.g. by detection of
PT   cleavage products for monitoring onset or progression of osteoarthritis.
XX
PS   Claim 3; Page 15-16; 28pp; English.
XX
CC   An artificial recombinant substrate, rAGG-1 (AAW18575), for aggreganase
CC   comprises the CD5 signal sequence, a FLAG epitope for M1 monoclonal
CC   antibody detection, the interglobular domain of human aggrecan, and human
CC   IgG1 hinge, CH2 and CH3 regions. It is the expression product of a DNA
CC   molecule (AAT69893) that can be incorporated into a vector for use in
CC   rAGG-1 prodn. in host cells. rAGG-1 can be used in cell culture systems
CC   to study the activity of aggrecanase, to detect new enzymatic cleavage
CC   sites, for the affinity purification of aggrecanase, to isolate
CC   aggrecanase cDNA by functional cloning, to screen for aggrecanase
CC   inhibitors, in methods for monitoring the onset or progression of
CC   osteoarthritis, and in diagnostic aids. Another rAGG-1 (AAW18574) has
CC   glycine at amino acid position 34. (Updated on 27-AUG-2003 to correct OS
CC   field.)
XX
SQ   Sequence 396 AA;

  Query Match           100.0%;  Score 1263;  DB 2;  Length 396;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        165 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 224

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        225 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        345 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 396


RESULT 71
ADF57557
ID   ADF57557 standard; protein; 396 AA.
XX
AC   ADF57557;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Mouse ymkz5-human Fc fusion protein.
XX
KW   Transmembrane decoy receptor; ymkz5; tumour necrosis factor; TNF; tumour;
KW   cancer; acquired immune deficiency syndrome; AIDS; anaemia;
KW   autoimmune disease; cachexia; leprosy; leukaemia; hepatitis;
KW   multiple sclerosis; myocardial ischaemia; obesity; gene therapy; mouse;
KW   receptor; human.
XX
OS   Chimeric.
OS   Mus musculus.
OS   Homo sapiens.
XX
PN   US2003096355-A1.
XX
PD   22-MAY-2003.
XX
PF   11-JUL-2002; 2002US-00193616.
XX
PR   09-JUL-1999;   99US-0143137P.
PR   07-JUL-2000; 2000US-00611989.
```

```
XX
PA   (ZHAN/) ZHANG K.
XX
PI   Zhang K;
XX
DR   WPI; 2004-008943/01.
XX
PT   Novel ymkz5-receptor polypeptide useful for treating diseases such as
PT   tumor, cancer, AIDS, anemia, autoimmune diseases, cachexia, leprosy,
PT   leukemia, hepatitis, multiple sclerosis.
XX
PS   Example 4; SEQ ID NO 14; 57pp; English.
XX
CC   The invention relates to transmembrane decoy receptor, ymkz5 belonging to
CC   tumour necrosis factor (TNF) receptor supergene family and nucleic acid
CC   sequences encoding such receptors. The invention is useful for detecting
CC   diseases or susceptibility to diseases related to the presence of mutated
CC   ymkz5-receptor gene such as tumours or cancers. The sequences of the
CC   invention are used as medication for a number of diseases such as
CC   acquired immune deficiency syndrome (AIDS), anaemia, autoimmune diseases,
CC   cachexia, leprosy, leukaemia, hepatitis, multiple sclerosis, myocardial
CC   ischaemia, obesity etc. The invention is also useful in gene therapy. The
CC   present sequence is mouse ymkz5-human Fc fusion protein.
XX
SQ   Sequence 396 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 396;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        165 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 224

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        225 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        345 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 396


RESULT 72
AAY15123
ID   AAY15123 standard; protein; 400 AA.
XX
AC   AAY15123;
XX
DT   07-FEB-2000  (first entry)
XX
DE   Porcine CTLA-4-Ig construct.
XX
KW   Porcine CTLA-4; soluble protein; xenograft; organ transplant; B7; CD28;
KW   xenograft-specific immunosuppression; recipient T-cell; anergy;
KW   co-stimulatory signal 2; homology; human CTLA-4; bovine CTLA-4.
XX
OS   Sus scrofa.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Region          162. .168
FT                   /label= Flexible_linker
FT                   /note= "Denotes the junction between pCTLA-4"
FT   Domain          169. .362
FT                   /label= IgG1_domain
XX
PN   WO9957266-A2.
XX
PD   11-NOV-1999.
XX
PF   30-APR-1999;   99WO-GB001350.
XX
PR   30-APR-1998;   98GB-00009280.
XX
PA   (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
PI   Lechler IR,  Dorling A;
XX
DR   WPI; 2000-038815/03.
XX
PT   Inhibiting T-cell mediated rejection of xenotransplanted organs.
XX
PS   Claim 1; Fig 4; 43pp; English.
XX
CC   The present sequence is porcine CTLA-4-Ig construct for xenograft -
CC   specific immunosuppression. In a pig-to-human transplantation, the
CC   soluble protein could comprise the extracellular domain of porcine CTLA-4
CC   fused to a human C gamma 1 chain of IgG1. This construct was subcloned
CC   into the expression vector pHOOK-3TM and used to transfect DAP.3 or CHO-
CC   K1 cells. pCTLA-4-Ig preferentially binds to porcine B7 and blocks its
CC   interaction with CD28 on recipient T-cells. This is useful as a species-
CC   specific reagent to inhibit human T-cell proliferative responses to a
CC   variety of stimulators
XX
SQ   Sequence 400 AA;

  Query Match             100.0%;  Score 1263;  DB 3;  Length 400;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        169 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 228

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        229 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 288

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        289 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 348

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        349 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 400


RESULT 73
AAU97108
ID   AAU97108 standard; protein; 404 AA.
XX
AC   AAU97108;
XX
DT   13-AUG-2002  (first entry)
XX
DE   Mouse MK61-human IgG Fc (mMK61-Fc) fusion protein.
XX
KW   Mouse; tumour necrosis factor receptor-like; TNFr-like; B-cell; T-cell;
KW   lymphoproliferative disorder; autoimmune disorder; inflammatory disease;
KW   leukocyte; osteoclast proliferation; apoptosis; cancer; cachexia;
KW   anorexia; coronary condition; depression; diabetes mellitus; pain;
KW   endometriosis; epilepsy; lung disease; ocular disease; pancreatitis;
KW   dermatomyositis; tissue transplantation; infection; human; mMK61-Fc;
KW   mutant; mutein; IgG.
XX
OS   Mus musculus.
OS   Homo sapiens.
OS   Synthetic.
OS   Chimeric.
XX
PN   WO200220762-A2.
```

XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-US027631.
XX
PR 05-SEP-2000; 2000US-0230191P.
XX
PA (AMGE-) AMGEN INC.
XX
PI Theill LE, Yeh R, Silbiger SM, Yu G, Senaldi G;
XX
DR WPI; 2002-371878/40.
DR N-PSDB; ABK50607.
XX
PT Novel tumor necrosis factor receptor-like polypeptides, polynucleotides
PT useful for diagnosing and treating associated diseases such as cancer,
PT myocardial infarction, diabetes, endometriosis, stroke and asthma.
XX
PS Claim 15; Fig 8; 257pp; English.
XX
CC The present invention relates to the isolation of novel tumour necrosis
CC factor receptor (TNFr)-like polypeptides, termed MK61, and the
CC polynucleotide sequences encoding them. The MK61 polypeptides are useful
CC for treating, preventing or ameliorating a medical condition in a mammal
CC resulting from abnormal levels of MK61 polypeptide. Such disorders
CC include B- or T-cell lymphoproliferative disorders (e.g. leukaemia, non-
CC Hodgkins lymphoma), autoimmune disorders (e.g. rheumatoid arthritis,
CC systemic lupus erythematosus (SLE), Crohn's disease), and inflammatory
CC diseases (e.g. sepsis, intestinal bowel disease). They can also be used
CC to prevent and treat disorders or conditions including leukocyte and/or
CC osteoclast proliferation, differentiation, survival, and/or apoptosis,
CC and in regulating growth, survival and/or apoptosis of lymphoma,
CC leukaemia and other cancer cells, acute and chronic TNF-associated
CC diseases including cachexia/anorexia, chronic fatigue syndrome, coronary
CC conditions and indications including congestive heart failure, coronary
CC restenosis, myocardial infarction, depression, diabetes mellitus,
CC endometriosis, analgesia, graft versus host rejection, diarrhoea, trauma,
CC epilepsy, haemorrhage, stroke, lung disease including asthma, pulmonary
CC fibrosis, ocular disease, pain, pancreatitis, reperfusion injury,
CC dermatomyositis, tissue transplantation, and infections (e.g. human
CC immunodeficiency virus (HIV)). The present sequence represents mouse MK61
CC -human IgG Fc (mMK61-Fc) fusion protein
XX
SQ Sequence 404 AA;

Query Match 100.0%; Score 1263; DB 5; Length 404;
Best Local Similarity 100.0%; Pred. No. 2.9e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        162 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 221

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 281

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 341

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        342 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 393
```

RESULT 74
AAB28693
ID AAB28693 standard; protein; 423 AA.
XX
AC AAB28693;
XX
DT 14-FEB-2001 (first entry)

XX
DE Fc-huAGP-1 (114-281) fusion protein.
XX
KW Human; AGP-1; type II transmembrane protein; cytostatic; antiviral;
KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;
KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;
KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;
KW transplant rejection; cardiovascular disease; arteriosclerosis;
KW Fc-huAGP-1; fusion protein.
XX
OS Homo sapiens.
XX
PN WO200063253-A1.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008004.
XX
PR 16-APR-1999; 99US-00293245.
XX
PA (AMGE-) AMGEN INC.
XX
PI Hsu H, Meng S;
XX
DR WPI; 2000-665240/64.
DR N-PSDB; AAC67833.
XX
PT Fusion protein of AGP-1 protein and an Fc region, used to treat
PT proliferative disorders, immune disorders, and virally-induced disorders.
XX
PS Disclosure; Fig 4; 93pp; English.
XX
CC The present sequence is an AGP-1 fusion protein. AGP-1 is a type II
CC transmembrane protein. The fusion proteins comprise an Fc immunoglobulin
CC region fused to the N-terminal portion of the AGP-1 protein. The fusion
CC proteins can be used to induce apoptosis in a tissue, and to treat
CC proliferative disorders, immune disorders, or virally-induced disorders.
CC The proliferative disorders include cancers, such as breast, prostate,
CC lung or colon cancer. The viral infections include hepatitis, and
CC acquired immunodeficiency syndrome (AIDS), and the immune disorders may
CC be autoimmune disorders or transplant rejection. Cardiovascular diseases
CC such as arteriosclerosis may also be treated. The AGP-1 containing fusion
CC proteins have increased biological activity compared to the soluble AGP-1
CC proteins used in prior art therapies
XX
SQ Sequence 423 AA;

Query Match 100.0%; Score 1263; DB 3; Length 423;
Best Local Similarity 100.0%; Pred. No. 3.1e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         24 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 255
```

RESULT 75
AAW14765
ID AAW14765 standard; protein; 424 AA.
XX
AC AAW14765;

```
XX
DT   11-JUN-1997  (first entry)
XX
DE   Human soluble kit ligand-IgG fusion protein (corrected).
XX
KW   Kit ligand; c-kit proto-oncogene; cytokine; growth factor;
KW   haematopoietic cell; cell proliferation; stem cell; anaemia;
KW   thrombocytopaenia; therapy; IgG1.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .25
FT                   /label= Sig_peptide
FT                   /note= "KL signal peptide"
FT   Protein         26. .424
FT                   /label= Mat_protein
FT                   /note= "human KL-IgG fusion"
XX
PN   WO9526199-A1.
XX
PD   05-OCT-1995.
XX
PF   28-MAR-1995;   95WO-US003866.
XX
PR   28-MAR-1994;   94US-00220379.
XX
PA   (CYTO-) CYTOMED INC.
XX
PI   Nocka KH,  Lobell RB;
XX
DR   WPI; 1995-351198/45.
DR   N-PSDB; AAT63110.
XX
PT   Covalent dimers of kit ligand or FLT-3/FLK-2 ligand - exhibit increased
PT   activity in promoting cell proliferation.
XX
PS   Claim 10; Page 46-48; 88pp; English.
XX
CC   A fusion protein (AAW14765) between human soluble kit ligand (KL) (see
CC   also AAW14761) and a human IgG1 heavy chain can be transiently expressed
CC   in COS cells transfected with a human KL-Ig cDNA construct (AAT63110) in
CC   vector CDM8. KL-Ig can also be produced as a dimer stabilised by
CC   intermolecular disulphide bonds or a peptide linker. The stabilised KL-Ig
CC   dimers have a more favorable cell proliferation:mast cell activation
CC   ratio than native KL and can stimulate haematopoietic recovery or stem
CC   cell/progenitor cell mobilisation with less toxicity
XX
SQ   Sequence 424 AA;

  Query Match          100.0%;  Score 1263;  DB 2;  Length 424;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        193 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 252

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        253 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 312

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        313 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 372

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        373 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 424


RESULT 76
AAW14764
ID   AAW14764 standard; protein; 424 AA.
XX
AC   AAW14764;
XX
DT   11-JUN-1997  (first entry)
XX
DE   Human soluble kit ligand-IgG fusion protein.
XX
KW   Kit ligand; c-kit proto-oncogene; cytokine; growth factor;
KW   haematopoietic cell; cell proliferation; stem cell; anaemia;
KW   thrombocytopaenia; therapy; IgG1.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .25
FT                   /label= Sig_peptide
FT                   /note= "KL signal peptide"
FT   Protein         26. .424
FT                   /label= Mat_protein
FT                   /note= "human KL-IgG fusion"
XX
PN   WO9526199-A1.
XX
PD   05-OCT-1995.
XX
PF   28-MAR-1995;   95WO-US003866.
XX
PR   28-MAR-1994;   94US-00220379.
XX
PA   (CYTO-) CYTOMED INC.
XX
PI   Nocka KH,  Lobell RB;
XX
DR   WPI; 1995-351198/45.
DR   N-PSDB; AAT63109.
XX
PT   Covalent dimers of kit ligand or FLT-3/FLK-2 ligand - exhibit increased
PT   activity in promoting cell proliferation.
XX
PS   Claim 10; Page 43-44; 88pp; English.
XX
CC   A fusion protein (AAW14764) between human soluble kit ligand (KL) (see
CC   also AAW14761) and a human IgG1 heavy chain can be transiently expressed
CC   in COS cells transfected with a human KL-Ig cDNA construct (AAT63109) in
CC   vector CDM8; a corrected KL-Ig construct (AAW14765) has also been prepd.
CC   KL-Ig can also be produced as a dimer stabilised by intermolecular
CC   disulphide bonds or a peptide linker. The stabilised KL-Ig dimers have a
CC   more favorable cell proliferation:mast cell activation ratio than native
CC   KL and can stimulate haematopoietic recovery or stem cell/progenitor cell
CC   mobilisation with less toxicity
XX
SQ   Sequence 424 AA;

  Query Match          100.0%;  Score 1263;  DB 2;  Length 424;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        193 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 252

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        253 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 312

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        313 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 372

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        373 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 424
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RESULT 77
AAB28695
ID   AAB28695 standard; protein; 426 AA.
XX
AC   AAB28695;
XX
DT   14-FEB-2001  (first entry)
XX
DE   Fc-muAGP-1 (120-291) fusion protein.
XX
KW   Mouse; AGP-1; type II transmembrane protein; cytostatic; antiviral;
KW   antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;
KW   human immunodeficiency virus; apoptosis; proliferative disorder; cancer;
KW   hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;
KW   transplant rejection; cardiovascular disease; arteriosclerosis;
KW   Fc-muAGP-1; fusion protein.
XX
OS   Mus sp.
XX
PN   WO200063253-A1.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008004.
XX
PR   16-APR-1999;   99US-00293245.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Hsu H,  Meng S;
XX
DR   WPI; 2000-665240/64.
DR   N-PSDB; AAC67835.
XX
PT   Fusion protein of AGP-1 protein and an Fc region, used to treat
PT   proliferative disorders, immune disorders, and virally-induced disorders.
XX
PS   Disclosure; Fig 6; 93pp; English.
XX
CC   The present sequence is part of an AGP-1 fusion protein. AGP-1 is a type
CC   II transmembrane protein. The fusion proteins comprise an Fc
CC   immunoglobulin region fused to the N-terminal portion of the AGP-1
CC   protein. The fusion proteins can be used to induce apoptosis in a tissue,
CC   and to treat proliferative disorders, immune disorders, or virally-
CC   induced disorders. The proliferative disorders include cancers, such as
CC   breast, prostate, lung or colon cancer. The viral infections include
CC   hepatitis, and acquired immunodeficiency syndrome (AIDS), and the immune
CC   disorders may be autoimmune disorders or transplant rejection.
CC   Cardiovascular diseases such as arteriosclerosis may also be treated. The
CC   AGP-1 containing fusion proteins have increased biological activity
CC   compared to the soluble AGP-1 proteins used in prior art therapies
XX
SQ   Sequence 426 AA;

  Query Match           100.0%;  Score 1263;  DB 3;  Length 426;
  Best Local Similarity  100.0%;  Pred. No. 3.1e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         24 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 255


RESULT 78
AAR26530
ID   AAR26530 standard; protein; 435 AA.
XX
AC   AAR26530;
XX
DT   25-MAR-2003  (revised)
DT   28-JAN-1993  (first entry)
XX
DE   Sequence of one chain of a CD4-gamma 1 chimeric heavy chain homodimer.
XX
KW   CD4-gamma 1 chimeric heavy chaim homodimer; expression vector; HIV;
KW   therapy; diagnostic agent; inhibition.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Region          1. .204
FT                   /label= CD4
FT                   /note= "1. .25 = preregion"
FT   Region          205. .219
FT                   /label= hinge
FT   Region          220. .329
FT                   /label= CH2
FT   Region          330. .436
FT                   /label= CH3
XX
PN   WO9213559-A1.
XX
PD   20-AUG-1992.
XX
PF   10-FEB-1992;   92WO-US001152.
XX
PR   08-FEB-1991;   91US-00654205.
XX
PA   (PROG-) PROGENICS PHARM INC.
XX
PI   Beaudry GA,  Maddon PJ;
XX
DR   WPI; 1992-299758/36.
DR   N-PSDB; AAQ27830.
XX
PT   CD4-gamma 1 chimeric heavy chain homo-dimer and its expression vector -
PT   for preventing and treating HIV infection useful as a diagnostic agent.
XX
PS   Example; Fig 3; 88pp; English.
XX
CC   Human CD4 cDNA was excised from pSP6T4 and cloned into M13mp18. The 2 kb
CC   PstI/PstI fragment from pBR lambda 1 contg. the human lambda 1 heavy
CC   chain gene (contg. the hinge, Ch2 and CH3 exons) was isolated and cloned
CC   into the BAP-treated M13mp18/CD4 vector. To obtain a CD4-lambda 1
CC   chimeric heavy chain gene, oligonucleotide-mediated site-directed
CC   mutagenesis was performed to juxtapose the CD4 and lambda 1 heavy chain
CC   DNA sequences, ligating the CD4 sequence in frame to the hinge exon. The
CC   DNA was then cloned into pcDNA-1 to produce CD4-IgG1-pcDNA1 (ATCC 40951).
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 435 AA;

  Query Match           100.0%;  Score 1263;  DB 2;  Length 435;
  Best Local Similarity  100.0%;  Pred. No. 3.2e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 263

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        264 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 323

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        324 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 383

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        384 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 435
```

RESULT 79
AAW10552
ID AAW10552 standard; protein; 437 AA.
XX
AC AAW10552;
XX
DT 22-APR-1997 (first entry)
XX
DE Alpha-1-acid glycoprotein-IgG1 fusion protein.
XX
KW IgG1; alpha-1-acid glycoprotein; AGP; sialyl-Lewis X; inflammation;
KW extravasation-dependent adverse reaction; organ damage; clotting;
KW adult respiratory distress syndrome; glomerular nephritis;
KW ischaemic myocardial injury; immune reaction; septic shock; septicaemia;
KW therapy; diagnosis.
XX
OS Homo sapiens.
XX
PN WO9700079-A1.
XX
PD 03-JAN-1997.
XX
PF 11-JUN-1996; 96WO-US010043.
XX
PR 14-JUN-1995; 95US-0000213P.
XX
PA (GEHO) GEN HOSPITAL CORP.
XX
PI Seed B, Pouyani T;
XX
DR WPI; 1997-077356/07.
DR N-PSDB; AAT60740.
XX
PT P-selectin and opt. E-selectin binding organic mol. - having sialyl-Le(x)
PT and sulphated determinant, useful for protecting against inflammatory or
PT immune reactions.
XX
PS Disclosure; Page 44-45; 81pp; English.
XX
CC A fusion protein (AAW10552) is composed of human acute phase alpha-1-acid
CC glycoprotein (AGP) and the constant domains of human IgG1. It is
CC expressed in host cells utilising a DNA construct (AAT60740) obtd. by
CC inserting alpha-1-AGP cDNA into an expression cassette contg. the IgG1
CC hinge-CH2-CH3 sequences. Sialyl-Le(x) addition sites may be introduced
CC into the antibody fusion protein e.g. by appending a P-selectin ligand
CC (see also AAW10530-32). The sialyl-Le(x) sites interfere with the
CC antibody's ability to fix complement or bind an Fc receptor. Expression
CC in fucosyltransferase-expressing host cells allows prodn. of soluble
CC antibody fusion proteins. These have therapeutic applns., e.g. in
CC minimising inflammation and decreasing extravasation-dependent organ
CC damage and/or clotting
XX
SQ Sequence 437 AA;

```
  Query Match             100.0%;  Score 1263;  DB 2;  Length 437;
  Best Local Similarity   100.0%;  Pred. No. 3.2e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 265

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 325

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 385

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 437
```

RESULT 80
ABJ37104
ID ABJ37104 standard; protein; 437 AA.
XX
AC ABJ37104;
XX
DT 08-MAY-2003 (first entry)
XX
DE Concatameric immunoadhesion human protein sequence SEQ ID No 14.
XX
KW Antiinflammatory; antibacterial; immunosuppressive; antirheumatic;
KW antiarthritic; immunomodulator; concatameric protein; soluble domain;
KW dimeric protein; inflammation; septicaemia; cytotoxicity;
KW rheumatoid arthritis; cachexia; inflammation; human.
XX
OS Homo sapiens.
XX
PN WO2003010202-A1.
XX
PD 06-FEB-2003.
XX
PF 26-JUL-2002; 2002WO-KR001427.
XX
PR 26-JUL-2001; 2001KR-00045028.
XX
PA (MEDE-) MEDEXGEN CO LTD.
XX
PI Chung Y, Han J, Lee H, Choi E, Kim J;
XX
DR WPI; 2003-229639/22.
DR N-PSDB; ABT32047.
XX
PT New concatameric protein having two soluble domains, useful for
PT diagnosing and treating disorders associated with the dimeric protein or
PT its glycosylated form, such as inflammation, septicemia, rheumatoid
PT arthritis and cachexia.
XX
PS Disclosure; Page 156-158; 211pp; English.
XX
CC The invention relates to a novel concatameric protein comprising two
CC soluble domains, in which an N-terminus of a soluble domain of a
CC biologically active protein is linked to a C-terminus of an identical
CC soluble domain or a different soluble domain of a biologically active
CC protein. The methods and compositions of the present invention are useful
CC for the diagnosis and treatment of disorders associated with dimeric
CC protein or its glycosylated form, such as inflammation, septicaemia,
CC cytotoxicity, rheumatoid arthritis, cachexia and other inflammation-
CC related diseases. This sequence represents the human concatameric protein
CC of the invention
XX
SQ Sequence 437 AA;

```
  Query Match             100.0%;  Score 1263;  DB 6;  Length 437;
  Best Local Similarity   100.0%;  Pred. No. 3.2e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 265
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Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 325

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 385

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 437
```

RESULT 81
ADQ79912
ID ADQ79912 standard; protein; 437 AA.
XX
AC ADQ79912;
XX
DT 09-SEP-2004 (first entry)
XX
DE Human CD2/Ig construct.
XX
KW Human; tumour necrosis factor receptor; TNFR1; TNFR2; CTLA4; CD2; IgG;
KW immunoglobulin; concatameric fused dimer protein; immunoadhesin;
KW Fc fragment; hinge.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN KR2004009997-A.
XX
PD 31-JAN-2004.
XX
PF 26-JUL-2002; 2002KR-00045921.
XX
PR 26-JUL-2002; 2002KR-00045921.
XX
PA (MEDE-) MEDEXGEN INC.
XX
PI Choi EY, Han JU, Jung YH, Kim JM, Lee HJ;
XX
DR WPI; 2004-458871/43.
DR N-PSDB; ADQ79911.
XX
PT Concatameric immunoadhesin.
XX
PS Example 2; SEQ ID NO 14; 129pp; Korean.
XX
CC The invention relates to a concatameric fused dimer protein and
CC glycosylation modification protein providing concatameric immunoadhesin
CC with improved efficacy and stability. The concatameric protein is
CC characteristically formed by binding C-terminal of one biologically
CC active protein with N-terminal of same or different biologically active
CC protein, e.g. tumour necrosis factor receptors (TNFR1 and TNFR2), CD2 and
CC CTLA4. Two monomer proteins which are formed by fusing the extracellular
CC region of a protein participating in the same immune reaction to an
CC immunoglobulin Fc fragment, bound together at a hinge region by
CC disulphide bond to give the concatameric fused dimer protein, wherein the
CC immunoglobulin is IgG. The present sequence represents a monomeric or
CC dimeric IgG fusion protein (or a dimeric fusion protein containing
CC engineered N-glycosylation sites, designated "mg").
XX
SQ Sequence 437 AA;

```
  Query Match           100.0%;  Score 1263;  DB 8;  Length 437;
  Best Local Similarity  100.0%;  Pred. No. 3.2e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 265
```

```
Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 325

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 385

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 437
```

RESULT 82
ADO47876
ID ADO47876 standard; protein; 439 AA.
XX
AC ADO47876;
XX
DT 15-JUL-2004 (first entry)
XX
DE Alpha-Herpes virus resistance-related fusion protein SeqID1.
XX
KW infection resistance; alpha-herpes virus; aHV; germinal transgenesis;
KW transgene; germ line cell; chimeric protein; extracellular domain; ED;
KW cellular receptor; crystallisable fragment; CF; immunoglobulin; Ig;
KW virucide; viral glycoprotein; virus elimination; pig; pseudorabies virus;
KW Aujeszky disease; human; mouse; murine.
XX
OS Homo sapiens.
OS Mus sp.
OS Chimeric;.
XX
PN FR2845692-A1.
XX
PD 16-APR-2004.
XX
PF 15-OCT-2002; 2002FR-00012775.
XX
PR 15-OCT-2002; 2002FR-00012775.
XX
PA (FRHY-) FRANCE HYBRIDES.
XX
PI Ono E, Uede T;
XX
DR WPI; 2004-319594/30.
XX
PT Producing mammals resistant to infection by alpha-herpes virus,
PT particularly pigs resistant to pseudorabies, by expressing transgene
PT encoding fusion of receptor domain and immunoglobulin.
XX
PS Disclosure; SEQ ID NO 1; 31pp; French.
XX
CC This invention relates to a novel method of producing a non-human mammal
CC that has been made resistant to infection by an alpha-herpes virus (aHV)
CC by germinal transgenesis comprising introducing, by insertion or
CC homologous recombination, a transgene into the genome of germ line cells.
CC The transgene encodes, in a suitable expression system, a chimeric
CC protein comprising at least part of the extracellular domain (ED) of the
CC cellular receptor for aHV and a crystallisable fragment (CF) of an
CC immunoglobulin (Ig). The invention may be useful for the production of
CC compounds with a virucide activity through the binding of viral
CC glycoproteins, therefore inhibiting entry of virus into cells or
CC promoting elimination of virus. The method is especially used to produce
CC pigs that are resistant to infection by pseudorabies virus, the causative
CC agent of Aujeszky disease. The present sequence is that of a fusion
CC protein which may be used in the method of the invention.
XX
SQ Sequence 439 AA;

```
  Query Match           100.0%;  Score 1263;  DB 8;  Length 439;
  Best Local Similarity  100.0%;  Pred. No. 3.2e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        208 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 267

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        268 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 327

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        328 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 387

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        388 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 439
```

RESULT 83
ADJ66000
ID ADJ66000 standard; protein; 440 AA.
XX
AC ADJ66000;
XX
DT 06-MAY-2004 (first entry)
XX
DE Herpes virus entry mediator-related protein #6.
XX
KW therapeutic agent; endotoxin induced disease; fusion protein;
KW Herpes virus entry mediator; HVEM; immunoglobulin Fc domain;
KW endotoxic shock.
XX
OS Unidentified.
XX
PN JP2003128576-A.
XX
PD 08-MAY-2003.
XX
PF 25-OCT-2001; 2001JP-00328430.
XX
PR 25-OCT-2001; 2001JP-00328430.
XX
PA (TAIS) TAISHO PHARM CO LTD.
PA (GENE-) GENE TECHNO SCI KK.
XX
DR WPI; 2003-817833/77.
XX
PT New therapeutic agent, useful for treating endotoxin induced disease,
PT comprises fusion protein of Herpes virus entry mediator protein and
PT immunoglobulin.
XX
PS Disclosure; SEQ ID NO 11; 11pp; Japanese.
XX
CC The invention comprises a therapeutic agent for treating endotoxin
CC induced disease, the therapeutic agent contains a fusion protein of the
CC Herpes virus entry mediator (HVEM) protein and an immunoglobulin Fc
CC domain. The therapeutic agent of the invention is useful for treating
CC endotoxin induced disease, such as endotoxic shock. The present amino
CC acid sequence represents protein which was used in the exemplification of
CC the invention.
XX
SQ Sequence 440 AA;

```
  Query Match             100.0%;  Score 1263;  DB 7;  Length 440;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        209 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 268

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        269 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 328

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        329 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 388

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        389 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 440
```

RESULT 84
ADP03589
ID ADP03589 standard; protein; 440 AA.
XX
AC ADP03589;
XX
DT 29-JUL-2004 (first entry)
XX
DE Infection resistant mammal-related fusion protein SeqID1.
XX
KW infection resistant; alpha-herpes virus; aHV; HveC; nectin-1;
KW functional receptor; germinal transgenesis; homologous recombination;
KW germ line cell; virucide; viral glycoprotein; pig; pseudorabies virus;
KW Aujeszky disease; bovine; bovine herpes virus-1;
KW infectious rhinotracheitis; fusion; mouse; murine; human.
XX
OS Mus sp.
OS Homo sapiens.
XX
PN FR2845693-A1.
XX
PD 16-APR-2004.
XX
PF 14-OCT-2003; 2003FR-00011983.
XX
PR 15-OCT-2002; 2002FR-00012775.
XX
PA (FRHY-) FRANCE HYBRIDES.
XX
PI Ono E, Uede T;
XX
DR WPI; 2004-332971/31.
XX
PT Producing mammals resistant to infection by alpha-herpes virus, e.g. pigs
PT resistant to pseudorabies, by expressing transgene encoding fusion of
PT receptor domain and immunoglobulin.
XX
PS Disclosure; SEQ ID NO 1; 43pp; French.
XX
CC This invention relates to a method of producing a non-human mammal that
CC has been made resistant to infection by an alpha-herpes virus (aHV), for
CC which the polypeptides HveC or nectin-1 represent functional receptors,
CC by germinal transgenesis comprising introducing, by insertion or
CC homologous recombination, a transgene into the genome of germ line cells.
CC The invention may be useful for the production of compounds with a
CC virucide activity. The invention promotes the binding of viral
CC glycoproteins, thus inhibiting entry of a virus into cells or promoting
CC elimination of virus. The method is especially used to produce pigs that
CC are resistant to infection by pseudorabies virus, the causative agent of
CC Aujeszky disease, or bovines that are resistant to bovine herpes virus-1,
CC the causative agent of infectious rhinotracheitis. The present sequence
CC is that of a fusion protein which was used in the method of the
CC invention.
XX
SQ Sequence 440 AA;

```
  Query Match             100.0%;  Score 1263;  DB 8;  Length 440;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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```
Db        209 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 268

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        269 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 328

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        329 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 388

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        389 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 440
```

RESULT 85
AAB28692
ID AAB28692 standard; protein; 441 AA.
XX
AC AAB28692;
XX
DT 14-FEB-2001 (first entry)
XX
DE Fc-huAGP-1 (95-281) fusion protein.
XX
KW Human; AGP-1; type II transmembrane protein; cytostatic; antiviral;
KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;
KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;
KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;
KW transplant rejection; cardiovascular disease; arteriosclerosis;
KW Fc-huAGP-1; fusion protein.
XX
OS Homo sapiens.
XX
PN WO200063253-A1.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008004.
XX
PR 16-APR-1999; 99US-00293245.
XX
PA (AMGE-) AMGEN INC.
XX
PI Hsu H, Meng S;
XX
DR WPI; 2000-665240/64.
DR N-PSDB; AAC67832.
XX
PT Fusion protein of AGP-1 protein and an Fc region, used to treat
PT proliferative disorders, immune disorders, and virally-induced disorders.
XX
PS Disclosure; Fig 3; 93pp; English.
XX
CC The present sequence is an AGP-1 fusion protein. AGP-1 is a type II
CC transmembrane protein. The fusion proteins comprise an Fc immunoglobulin
CC region fused to the N-terminal portion of the AGP-1 protein. The fusion
CC proteins can be used to induce apoptosis in a tissue, and to treat
CC proliferative disorders, immune disorders, or virally-induced disorders.
CC The proliferative disorders include cancers, such as breast, prostate,
CC lung or colon cancer. The viral infections include hepatitis, and
CC acquired immunodeficiency syndrome (AIDS), and the immune disorders may
CC be autoimmune disorders or transplant rejection. Cardiovascular diseases
CC such as arteriosclerosis may also be treated. The AGP-1 containing fusion
CC proteins have increased biological activity compared to the soluble AGP-1
CC proteins used in prior art therapies
XX
SQ Sequence 441 AA;

Query Match 100.0%; Score 1263; DB 3; Length 441;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         24 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 255
```

RESULT 86
AAW10550
ID AAW10550 standard; protein; 442 AA.
XX
AC AAW10550;
XX
DT 22-APR-1997 (first entry)
XX
DE IgG1 polypeptide.
XX
KW IgG1; P-selectin ligand; PSGL-1; counter-receptor; E-selectin;
KW sialyl-Lewis X; antiinflammatory; inflammation;
KW extravasation-dependent adverse reaction; organ damage; clotting;
KW adult respiratory distress syndrome; glomerular nephritis;
KW ischaemic myocardial injury; immune reaction; septic shock; septicaemia;
KW therapy; diagnosis.
XX
OS Homo sapiens.
XX
PN WO9700079-A1.
XX
PD 03-JAN-1997.
XX
PF 11-JUN-1996; 96WO-US010043.
XX
PR 14-JUN-1995; 95US-0000213P.
XX
PA (GEHO) GEN HOSPITAL CORP.
XX
PI Seed B, Pouyani T;
XX
DR WPI; 1997-077356/07.
DR N-PSDB; AAT60739.
XX
PT P-selectin and opt. E-selectin binding organic mol. - having sialyl-Le(x)
PT and sulphated determinant, useful for protecting against inflammatory or
PT immune reactions.
XX
PS Disclosure; Page 41-42; 81pp; English.
XX
CC Examination of the IgG1 amino acid sequence (AAW10550) revealed a number
CC of sites at which N-linked glycan addition sites could be introduced in
CC order to impair complement fixing and Fc receptor binding ability. Site-
CC directed mutagenesis of the IgG1 gene (AAT60739) yielded a mutant gene
CC encoding an IgG1 polypeptide (AAW10551) contg. additional N-linked
CC glycosylation sites. The mutant IgG1 can be co-expressed in a host cell
CC together with an alpha-(1,3)fucosyltransferase capable of attaching
CC sialyl-Le(x) groups to the antibody glycosylation sites. The sialyl-Le(x)
CC - modified antibody has therapeutic applns., e.g. in minimising
CC inflammation and decreasing extravasation-dependent organ damage and/or
CC clotting
XX
SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 2; Length 442;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;

```
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 87
ABR39465
ID   ABR39465 standard; protein; 442 AA.
XX
AC   ABR39465;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Humanised anti-Abeta antibody 266 heavy chain.
XX
KW   Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;
KW   immunostimulant.
XX
OS   Homo sapiens.
XX
PN   WO2003016467-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US021324.
XX
PR   17-AUG-2001; 2001US-0313576P.
PR   28-MAY-2002; 2002US-0383851P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Bales KR,  Paul SM;
XX
DR   WPI; 2003-289975/28.
XX
PT   Treating or reducing the progression of diseases associated with amyloid-
PT   beta peptide, e.g. Alzheimer's disease, vascular dementia or mild
PT   cognitive impairment, comprises administering an anti-amyloid-beta
PT   peptide antibody.
XX
PS   Disclosure; Page 20-22; 84pp; English.
XX
CC   The invention relates to treating cognitive symptoms or reducing disease
CC   progression in a subject having a condition or disease associated with
CC   amyloid-beta peptide (Abeta). The method involves administering an amount
CC   of an anti-Abeta antibody that has greater affinity for soluble Abeta
CC   than 10^-^9 M, that has affinity (KD) for soluble Abeta1-40 or Abeta1-42
CC   higher than 10^-^9 M, or that has greater affinity for soluble Abeta than
CC   antibody 266 has. The method or the anti-Abeta antibody is useful in
CC   preparing a medicament for treating cognitive symptoms or reducing
CC   disease progression in a subject having a condition or disease associated
CC   with Abeta. The condition or disease is Alzheimer's disease, Down's
CC   syndrome, cerebral amyloid angiopathy, vascular dementia, or mild
CC   cognitive impairment. The present sequence represents a humanised anti-
CC   Abeta antibody 266 heavy chain
XX
SQ   Sequence 442 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 88
ABR39474
ID   ABR39474 standard; protein; 442 AA.
XX
AC   ABR39474;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Humanised anti-Abeta antibody 266 analogue heavy chain.
XX
KW   Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;
KW   immunostimulant.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 56
FT                   /note= "Xaa is any amino acid, provided that if Xaa at
FT                   position 57 is neither Asp nor Pro and Xaa at position 59
FT                   is Ser or Thr, then Xaa at position 56 is not Asn"
FT   Misc-difference 57
FT                   /note= "Xaa is any amino acid, provided that if Xaa at
FT                   position 56 is Asn and Xaa at position 58 is Ser or Thr,
FT                   then Xaa at position 57 is Asp or Pro"
FT   Misc-difference 58
FT                   /note= "Xaa is any amino acid, provided that if Xaa at
FT                   position 56 is Asn and Xaa at position 57 is neither Asp
FT                   nor Pro, then Xaa at position 58 is neither Ser nor Thr"
XX
PN   WO2003016467-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US021324.
XX
PR   17-AUG-2001; 2001US-0313576P.
PR   28-MAY-2002; 2002US-0383851P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Bales KR,  Paul SM;
XX
DR   WPI; 2003-289975/28.
XX
PT   Treating or reducing the progression of diseases associated with amyloid-
PT   beta peptide, e.g. Alzheimer's disease, vascular dementia or mild
PT   cognitive impairment, comprises administering an anti-amyloid-beta
PT   peptide antibody.
XX
PS   Disclosure; Page 29-31; 84pp; English.
XX
CC   The invention relates to treating cognitive symptoms or reducing disease
CC   progression in a subject having a condition or disease associated with
```

```
CC   amyloid-beta peptide (Abeta). The method involves administering an amount
CC   of an anti-Abeta antibody that has greater affinity for soluble Abeta
CC   than 10^-^9 M, that has affinity (KD) for soluble Abeta1-40 or Abeta1-42
CC   higher than 10^-^9 M, or that has greater affinity for soluble Abeta than
CC   antibody 266 has. The method or the anti-Abeta antibody is useful in
CC   preparing a medicament for treating cognitive symptoms or reducing
CC   disease progression in a subject having a condition or disease associated
CC   with Abeta. The condition or disease is Alzheimer's disease, Down's
CC   syndrome, cerebral amyloid angiopathy, vascular dementia, or mild
CC   cognitive impairment. The present sequence represents a preferred heavy
CC   chain of a humanised anti-Abeta antibody 266 analogue that has a high
CC   affinity for Abeta
XX
SQ   Sequence 442 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 89
ABU08311
ID   ABU08311 standard; protein; 442 AA.
XX
AC   ABU08311;
XX
DT   22-MAY-2003  (first entry)
XX
DE   Humanised 266 antibody heavy chain.
XX
KW   Mouse; cognition; Abeta peptide associated disorder; anti-Abeta antibody;
KW   cognitive impairment; Alzheimer's disease; Down's syndrome;
KW   cerebral amyloid angiopathy; vascular dementia; nootropic; neurotropic;
KW   mild cognitive impairment; antibody 266; heavy chain; humanised; mutant;
KW   mutein.
XX
OS   Mus sp.
OS   Synthetic.
XX
PN   WO2003015691-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US021323.
XX
PR   17-AUG-2001; 2001US-0313222P.
PR   28-MAY-2002; 2002US-0383846P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Bales KR,  Dodart JF,  Paul SM;
XX
DR   WPI; 2003-268234/26.
XX
PT   Effecting rapid improvement of cognition in a subject having Alzheimer's
PT   disease, Down's syndrome, cerebral amyloid angiopathy, or mild cognitive
PT   impairment, comprises administering anti-A beta antibody.
XX
PS   Disclosure; Page 21-23; 85pp; English.
XX
CC   The present invention relates to a method for effecting rapid improvement
CC   of cognition in a subject having a condition or disease related to the
CC   Abeta peptide. The method comprises administering an anti-Abeta antibody.
CC   The method is useful for treating cognitive impairments associated with
CC   Abeta peptide including those involved in Alzheimer's disease, Down's
CC   syndrome, cerebral amyloid angiopathy, certain vascular dementia, and
CC   certain forms of mild cognitive impairment. The anti-Abeta antibody is
CC   useful for preparing a medicament for effecting rapid improvement in
CC   cognition in a subject having Alzheimer's disease, Down's syndrome,
CC   cerebral amyloid angiopathy, or mild cognitive impairment. The present
CC   sequence represents a preferred heavy chain for a humanised 266 antibody
XX
SQ   Sequence 442 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 90
ABU08320
ID   ABU08320 standard; protein; 442 AA.
XX
AC   ABU08320;
XX
DT   22-MAY-2003  (first entry)
XX
DE   Humanised antibody 266 heavy chain.
XX
KW   Mouse; cognition; Abeta peptide associated disorder; anti-Abeta antibody;
KW   cognitive impairment; Alzheimer's disease; Down's syndrome;
KW   cerebral amyloid angiopathy; vascular dementia; nootropic; neurotropic;
KW   mild cognitive impairment; heavy chain; antibody 266; mutant; mutein.
XX
OS   Mus sp.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 56
FT                   /note= "Any amino acid, provided that if Xaa at position
FT                   57 is neither Asp nor Pro and Xaa at position 58 is Ser
FT                   or Thr, then Xaa at position 56 is not Asn"
FT   Misc-difference 57
FT                   /note= "Any amino acid, provided that if Xaa at position
FT                   56 is Asn and Xaa at position 58 is Ser or Thr, then Xaa
FT                   at position 57 is Asp or Pro"
FT   Misc-difference 58
FT                   /note= "Any amino acid, provided that if Xaa at position
FT                   56 is Asn and Xaa at position 57 is neither Asp nor Pro,
FT                   then Xaa at position 58 is neither Ser nor Thr"
XX
PN   WO2003015691-A2.
XX
PD   27-FEB-2003.
```

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XX
PF   14-AUG-2002; 2002WO-US021323.
XX
PR   17-AUG-2001; 2001US-0313222P.
PR   28-MAY-2002; 2002US-0383846P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Bales KR,  Dodart JF,  Paul SM;
XX
DR   WPI; 2003-268234/26.
XX
PT   Effecting rapid improvement of cognition in a subject having Alzheimer's
PT   disease, Down's syndrome, cerebral amyloid angiopathy, or mild cognitive
PT   impairment, comprises administering anti-A beta antibody.
XX
PS   Example 8; Page 30-32; 85pp; English.
XX
CC   The present invention relates to a method for effecting rapid improvement
CC   of cognition in a subject having a condition or disease related to the
CC   Abeta peptide. The method comprises administering an anti-Abeta antibody.
CC   The method is useful for treating cognitive impairments associated with
CC   Abeta peptide including those involved in Alzheimer's disease, Down's
CC   syndrome, cerebral amyloid angiopathy, certain vascular dementia, and
CC   certain forms of mild cognitive impairment. The anti-Abeta antibody is
CC   useful for preparing a medicament for effecting rapid improvement in
CC   cognition in a subject having Alzheimer's disease, Down's syndrome,
CC   cerebral amyloid angiopathy, or mild cognitive impairment. The present
CC   sequence represents a heavy chain that can be used to produce a preferred
CC   humanised antibody of the invention
XX
SQ   Sequence 442 AA;

  Query Match            100.0%;  Score 1263;  DB 6;  Length 442;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 91
ABR39793
ID   ABR39793 standard; peptide; 442 AA.
XX
AC   ABR39793;
XX
DT   18-AUG-2003  (first entry)
XX
DE   Humanised anti-Abeta antibody 266 heavy chain.
XX
KW   Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;
KW   immunostimulant.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 56
FT                   /note= "Xaa is any amino acid, provided that if Xaa at
FT                   position 57 is neither Asp nor Pro and Xaa at position 59
FT                   is Ser or Thr, then Xaa at position 56 is not Asn"
FT   Misc-difference 57
FT                   /note= "Xaa is any amino acid, provided that if Xaa at
FT                   position 56 is Asn and Xaa at position 58 is Ser or Thr,
FT                   then Xaa at position 57 is Asp or Pro"
FT   Misc-difference 58
FT                   /note= "Xaa is any amino acid, provided that if Xaa at
FT                   position 56 is Asn and Xaa at position 57 is neither Asp
FT                   nor Pro, then Xaa at position 58 is neither Ser nor Thr"
XX
PN   WO2003016466-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US021322.
XX
PR   17-AUG-2001; 2001US-0313224P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Jia AY,  Tsurushita N,  Vasquez MJ;
XX
DR   WPI; 2003-278557/27.
XX
PT   New antibodies comprising a heavy chain and a light chain complementarity
PT   determining regions from antibody 266, for treating and preventing
PT   conditions associated with the A beta peptide, e.g. Alzheimer's disease
PT   or Down syndrome.
XX
PS   Disclosure; Page 21-23; 82pp; English.
XX
CC   The invention relates to an anti-Abeta (amyloid-beta peptide) antibody
CC   266. The antibodies are useful for treating and preventing conditions
CC   associated with the Abeta peptide, such as Alzheimer's disease, Down
CC   syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in
CC   humans; for determining whether a human subject will respond to treatment
CC   using humanized antibodies against Abeta; for treating, preventing and
CC   reversing cognitive decline in clinical or pre-clinical Alzheimer's
CC   disease, Down's syndrome or cerebral amyloid angiopathy; for inhibiting
CC   formation of amyloid plaques of the effects of toxic soluble Abeta
CC   species in humans. Treatment of the patients with antibody will inhibit
CC   or prevent cognitive decline typically associated with disease
CC   progression and reverses it. The present sequence represents a preferred
CC   heavy chain of the humanised anti-Abeta antibody 266
XX
SQ   Sequence 442 AA;

  Query Match            100.0%;  Score 1263;  DB 6;  Length 442;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 92
ABB80113
ID   ABB80113 standard; protein; 442 AA.
XX
AC   ABB80113;
```

```
XX
DT   13-JUN-2003  (first entry)
XX
DE   Deglycosylated heavy chain.
XX
KW   Complementarity determining region; CDR; humanised; mouse; 266; light;
KW   heavy; variable; domain; antibody; preclinical; clinical;
KW   Alzheimer's disease; epitope; amyloid beta peptide; Abeta;
KW   central nervous system; plasma.
XX
OS   Homo sapiens.
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 56
FT                   /label= Any amino acid
FT                   /note= "Provided that if Xaa57 is neither Asp nor Pro and
FT                   Xaa58 is Ser or Thr, then Xaa56 is not Asn"
FT   Misc-difference 57
FT                   /label= Any amino acid
FT                   /note= "Provided that if Xaa56 is Asn and Xaa58 is Ser or
FT                   Thr, then Xaa57 is Asp or Pro"
FT   Misc-difference 58
FT                   /label= Any amino acid
FT                   /note= "Provided that if Xaa56 is Asn and Xaa57 is
FT                   neither Asp nor Pro, then Xaa58 is neither Ser nor Thr"
XX
PN   WO2003015617-A2.
XX
PD   27-FEB-2003.
XX
PF   16-AUG-2002; 2002WO-US026321.
XX
PR   17-AUG-2001; 2001US-0313221P.
PR   17-AUG-2001; 2001US-0313224P.
PR   23-OCT-2001; 2001US-0334987P.
XX
PA   (UNIW ) UNIV WASHINGTON.
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Holtzman DM,  Demattos R,  Bales KR,  Cummins DJ,  Paul SM;
XX
DR   WPI; 2003-278505/27.
XX
PT   Diagnosing preclinical or clinical Alzheimer's disease in a subject by
PT   administering an antibody which specifically binds an epitope.
XX
PS   Claim 8; Page 20-22; 64pp; English.
XX
CC   This sequence represents the preferred heavy chain from a deglycosylated
CC   version of the humanised mouse antibody 266 heavy chain of the invention.
CC   The antibody of the invention specifically binds an epitope, preferably
CC   the amyloid beta peptide (Abeta). The antibodies sequester Abeta from its
CC   bound, circulating form in blood and alter clearance of soluble and bound
CC   forms of Abeta in central nervous system and plasma. The antibodies
CC   specifically bind an epitope representing amino acids 13-28 of the Abeta
CC   molecule. Deglycosylation of the heavy chain CDR2, as in this sequence,
CC   causes higher affinity for Abeta. The antibody of the invention may be
CC   used for diagnosing preclinical or clinical Alzheimer's disease
XX
SQ   Sequence 442 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 93
ABB80109
ID   ABB80109 standard; protein; 442 AA.
XX
AC   ABB80109;
XX
DT   13-JUN-2003  (first entry)
XX
DE   Heavy chain.
XX
KW   Complementarity determining region; CDR; humanised; mouse; 266; light;
KW   heavy; variable; domain; antibody; preclinical; clinical;
KW   Alzheimer's disease; epitope; amyloid beta peptide; Abeta;
KW   central nervous system; plasma.
XX
OS   Homo sapiens.
OS   Mus musculus.
XX
PN   WO2003015617-A2.
XX
PD   27-FEB-2003.
XX
PF   16-AUG-2002; 2002WO-US026321.
XX
PR   17-AUG-2001; 2001US-0313221P.
PR   17-AUG-2001; 2001US-0313224P.
PR   23-OCT-2001; 2001US-0334987P.
XX
PA   (UNIW ) UNIV WASHINGTON.
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Holtzman DM,  Demattos R,  Bales KR,  Cummins DJ,  Paul SM;
XX
DR   WPI; 2003-278505/27.
XX
PT   Diagnosing preclinical or clinical Alzheimer's disease in a subject by
PT   administering an antibody which specifically binds an epitope.
XX
PS   Disclosure; Page 15-16; 64pp; English.
XX
CC   The sequences given in AAG80104-09 represent preferred antibodies of the
CC   invention. This sequence represents the preferred heavy chain. The
CC   humanised antibody of the invention may be used for diagnosing
CC   preclinical or clinical Alzheimer's disease. The antibody specifically
CC   binds an epitope, preferably the amyloid beta peptide (Abeta). The
CC   antibodies sequester Abeta from its bound, circulating form in blood and
CC   alter clearance of soluble and bound forms of Abeta in central nervous
CC   system and plasma. The antibodies specifically bind an epitope
CC   representing amino acids 13-28 of the Abeta molecule
XX
SQ   Sequence 442 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330
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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 94
ADE94066
ID   ADE94066 standard; protein; 442 AA.
XX
AC   ADE94066;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Humanised anti-Abeta antibody 266 heavy chain SEQ ID NO:12.
XX
KW   anxiety disorder; mood disorder; anti-Abeta antibody; Abeta; nootropic;
KW   neuroprotective; antidepressant; neuroleptic; tranquilliser;
KW   gene therapy; Alzheimer's disease; chronic amyloid angiopathy;
KW   depression; major depressive episode; unipolar major depression;
KW   schizophrenia; simple phobia; social phobia; agoraphobia; panic disorder;
KW   obsessive-compulsive disorder; post-traumatic stress disorder.
XX
OS   Synthetic.
OS   Mus sp.
OS   Homo sapiens.
XX
PN   WO2003090772-A1.
XX
PD   06-NOV-2003.
XX
PF   17-APR-2003; 2003WO-US010473.
XX
PR   25-APR-2002; 2002US-0375462P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Gerlai RT;
XX
DR   WPI; 2003-865528/80.
XX
PT   Treating, preventing and/or diagnosing a condition related to Abeta
PT   expression, such as anxiety or mood disorders, including Alzheimer's
PT   disease, depression, and schizophrenia, by administering an anti-Abeta
PT   antibody to the subject.
XX
PS   Claim 24; SEQ ID NO 12; 64pp; English.
XX
CC   The present invention describes a method for treating an anxiety disorder
CC   or a mood disorder in an elderly subject. The method comprises
CC   administering an anti-Abeta antibody to the subject. Also described are
CC   Abeta nucleic acids, polypeptides, antibodies and pharmaceutical
CC   compositions used in the methods of the invention. Abeta has nootropic,
CC   neuroprotective, antidepressant, neuroleptic and tranquilliser
CC   activities, and can be used in gene therapy. The methods and compositions
CC   of the present invention are useful for treating, preventing and/or
CC   diagnosing a condition related to Abeta expression, such as anxiety or
CC   mood disorders, including Alzheimer's disease, chronic amyloid
CC   angiopathy, depression, major or minor depression, a major depressive
CC   episode, a unipolar major depression, schizophrenia, simple phobia,
CC   social phobia, agoraphobia, panic disorder, obsessive-compulsive disorder
CC   or post-traumatic stress disorder. The present sequence is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 442 AA;

  Query Match           100.0%;  Score 1263;  DB 7;  Length 442;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 95
ADE94075
ID   ADE94075 standard; protein; 442 AA.
XX
AC   ADE94075;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Humanised anti-Abeta antibody heavy chain SEQ ID NO:21.
XX
KW   anxiety disorder; mood disorder; anti-Abeta antibody; Abeta; nootropic;
KW   neuroprotective; antidepressant; neuroleptic; tranquilliser;
KW   gene therapy; Alzheimer's disease; chronic amyloid angiopathy;
KW   depression; major depressive episode; unipolar major depression;
KW   schizophrenia; simple phobia; social phobia; agoraphobia; panic disorder;
KW   obsessive-compulsive disorder; post-traumatic stress disorder.
XX
OS   Synthetic.
OS   Mus sp.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 56
FT                   /note= "X at position 56 is any amino acid, provided that
FT                   if X at position 57 is neither Asp nor Pro and X at
FT                   position 59 is Ser or Thr, then X at position 56 is not
FT                   Asn"
FT   Misc-difference 57
FT                   /note= "X at position 57 is any amino acid, provided that
FT                   if X at position 56 is Asn and X at position 58 is Ser or
FT                   Thr, then X at position 57 is Asp or Pro"
FT   Misc-difference 58
FT                   /note= "X at position 58 is any amino acid, provided that
FT                   if X at position 56 is Asn and X at position 57 is
FT                   neither Asp nor Pro, then X at position 58 is neither Ser
FT                   nor Thr"
XX
PN   WO2003090772-A1.
XX
PD   06-NOV-2003.
XX
PF   17-APR-2003; 2003WO-US010473.
XX
PR   25-APR-2002; 2002US-0375462P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Gerlai RT;
XX
DR   WPI; 2003-865528/80.
XX
PT   Treating, preventing and/or diagnosing a condition related to Abeta
PT   expression, such as anxiety or mood disorders, including Alzheimer's
PT   disease, depression, and schizophrenia, by administering an anti-Abeta
PT   antibody to the subject.
```

```
XX
PS   Claim 24; SEQ ID NO 21; 64pp; English.
XX
CC   The present invention describes a method for treating an anxiety disorder
CC   or a mood disorder in an elderly subject. The method comprises
CC   administering an anti-Abeta antibody to the subject. Also described are
CC   Abeta nucleic acids, polypeptides, antibodies and pharmaceutical
CC   compositions used in the methods of the invention. Abeta has nootropic,
CC   neuroprotective, antidepressant, neuroleptic and tranquilliser
CC   activities, and can be used in gene therapy. The methods and compositions
CC   of the present invention are useful for treating, preventing and/or
CC   diagnosing a condition related to Abeta expression, such as anxiety or
CC   mood disorders, including Alzheimer's disease, chronic amyloid
CC   angiopathy, depression, major or minor depression, a major depressive
CC   episode, a unipolar major depression, schizophrenia, simple phobia,
CC   social phobia, agoraphobia, panic disorder, obsessive-compulsive disorder
CC   or post-traumatic stress disorder. The present sequence is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 442 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 96
ADH54473
ID   ADH54473 standard; protein; 442 AA.
XX
AC   ADH54473;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human immunoglobulin IgG1protein.
XX
KW   Human; ELAM-1 protein; sialyl-Lex determinant; immune reaction;
KW   inflammation; sepsis; organ damage; leukocyte extravasation;
KW   adult respiratory distress syndrome; glomerular nephritis;
KW   rheumatoid arthritis; gene therapy; antibody-based therapy; heart attack;
KW   septic shock; septicaemia; rheumatoid arthritis; psoriasis;
KW   immunoglobulin; IgG1.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 211
FT                   /note= "Encoded by AGA"
FT   Misc-difference 212
FT                   /note= "Encoded by GCC "
FT   Misc-difference 213
FT                   /note= "Encoded by CAA"
FT   Misc-difference 214
FT                   /note= "Encoded by ATC"
FT   Misc-difference 215
FT                   /note= "Encoded by TTG"
FT   Misc-difference 216
FT                   /note= "Encoded by TGA "
FT   Misc-difference 217
FT                   /note= "Encoded by CAA"
FT   Misc-difference 218
FT                   /note= "Encoded by AAC "
FT   Misc-difference 219
FT                   /note= "Encoded by TCA "
FT   Misc-difference 220
FT                   /note= "Encoded by CAC"
FT   Misc-difference 221
FT                   /note= "Encoded by ATG "
FT   Misc-difference 223
FT                   /note= "Encoded by ACC"
FT   Misc-difference 224
FT                   /note= "Encoded by GTG"
FT   Misc-difference 238
FT                   /note= "Encoded by TAG"
FT   Misc-difference 239
FT                   /note= "Encoded by GGG"
FT   Misc-difference 240
FT                   /note= "Encoded by GGT"
FT   Misc-difference 241
FT                   /note= "Encoded by TTT "
FT   Misc-difference 242
FT                   /note= "Encoded by GGG"
FT   Misc-difference 243
FT                   /note= "Encoded by TTC"
FT   Misc-difference 244
FT                   /note= "Encoded by CTG"
FT   Misc-difference 245
FT                   /note= "Encoded by TGG"
FT   Misc-difference 246
FT                   /note= "Encoded by GAG"
FT   Misc-difference 247
FT                   /note= "Encoded by TAC"
FT   Misc-difference 248
FT                   /note= "Encoded by TAG"
FT   Misc-difference 249
FT                   /note= "Encoded by AGG"
FT   Misc-difference 250
FT                   /note= "Encoded by GCC"
FT   Misc-difference 251
FT                   /note= "Encoded by TGG "
FT   Misc-difference 252
FT                   /note= "Encoded by GGA"
FT   Misc-difference 253
FT                   /note= "Encoded by CTC"
FT   Misc-difference 254
FT                   /note= "Encoded by CAG"
FT   Misc-difference 255
FT                   /note= "Encoded by TGT"
FT   Misc-difference 256
FT                   /note= "Encoded by ACG"
FT   Misc-difference 257
FT                   /note= "Encoded by CAC"
FT   Misc-difference 258
FT                   /note= "Encoded by CTG "
XX
PN   US6613746-B1.
XX
PD   02-SEP-2003.
XX
PF   07-JUN-1995;   95US-00472888.
XX
PR   23-NOV-1990;   90US-00618314.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Seed B,  Walz G;
XX
DR   WPI; 2003-895370/82.
DR   N-PSDB; ADH54467.
XX
```

PT Inhibiting the binding of a cell bearing ELAM-1 protein to a cell bearing
PT sialyl-Lex determinant, useful in treating inflammation, comprises
PT contacting the ELAM-1 bearing cell with alpha 1-acid glycoprotein-
PT antibody fusion protein.
XX
PS Disclosure; SEQ ID NO 7; 40pp; English.
XX
CC The invention relates to a method for inhibiting the binding of a cell
CC bearing an ELAM-1 protein to a molecule or cell bearing a sialyl-Lex
CC determinant. The method comprising contacting the ELAM-1 bearing cell
CC with an alpha1 -acid glycoprotein (AGP)-antibody fusion protein bearing
CC the sialyl-Lex determinant, where the inhibition of an ELAM-1-sialyl-Lex-
CC based interaction treats an adverse immune reaction. The invention is
CC useful in reducing inflammation in a human patient and protecting a
CC mammal against any adverse immune reaction (including sepsis, organ
CC damage attributable to inappropriate leukocyte extravasation, adult
CC respiratory distress syndrome, glomerular nephritis or rheumatoid
CC arthritis). The invention is useful in gene therapy. The method, as well
CC as the AGP-antibody fusion protein, are useful in any antibody-based
CC therapy, for e.g. to reduce inflammation or to treat heart attack, septic
CC shock, septicaemia, rheumatoid arthritis or psoriasis. The present
CC sequence is human immunoglobulin IgG1 protein.
XX
SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 7; Length 442;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442
```

RESULT 97
ADN61714
ID ADN61714 standard; protein; 442 AA.
XX
AC ADN61714;
XX
DT 01-JUL-2004 (first entry)
XX
DE Humanised antibody heavy chain variable region #3.
XX
KW antibody; humanised antibody;
KW light chain complementarity determining region; CDR; amyloid plaque;
KW amyloid beta; Abeta; cognitive decline; Alzheimer's disease;
KW Down's syndrome; cerebral amyloid angiopathy; cognition;
KW heavy chain variable region.
XX
OS Homo sapiens.
OS Mus sp.
XX
PN US2004043418-A1.
XX
PD 04-MAR-2004.
XX
PF 21-AUG-2002; 2002US-00226435.
XX
PR 21-AUG-2002; 2002US-00226435.
XX
PA (HOLT/) HOLTZMAN D M.
PA (DEMA/) DEMATTOS R.
PA (BALE/) BALES K R.
PA (PAUL/) PAUL S M.
PA (TSUR/) TSURUSHITA N.
PA (VASQ/) VASQUEZ M.
XX
PI Holtzman DM, Demattos R, Bales KR, Paul SM, Tsurushita N;
PI Vasquez M;
XX
DR WPI; 2004-238334/22.
DR N-PSDB; ADN61720.
XX
PT New humanized antibody or its fragment that sequesters amyloid beta
PT peptide, useful for treating, preventing or reversing cognitive decline
PT in Alzheimer's disease and Down's syndrome.
XX
PS Claim 5; SEQ ID NO 12; 35pp; English.
XX
CC The invention relates to a humanised antibody or its fragment comprising
CC a light chain comprising three light chain complementarity determining
CC regions (CDRs) and a light chain framework sequence from a humanised
CC immunoglobulin light chain, a heavy chain comprising three heavy chain
CC CDRs and a heavy chain framework sequence from a humanised immunoglobulin
CC heavy chain. Also described are the following: (i) a polynucleic acid
CC comprising a sequence coding for the light chain or the heavy chain of
CC the humanised antibody; (ii) an expression vector for expressing the
CC antibody or its fragment comprising nucleotide sequences encoding the
CC antibody or fragment; and (iii) a cell transfected with the expression
CC vector or two expression vectors, where a first vector comprises the
CC polynucleotide sequence coding for the light chain and a second vector
CC comprises the sequence coding for the heavy chain, and capable of
CC expressing the humanised antibody or its fragment. The humanised antibody
CC or its fragment is useful in inhibiting or reducing the formation of
CC amyloid plaques or the effects of toxic soluble amyloid beta (Abeta)
CC species in humans, for treating, preventing, or reversing cognitive
CC decline in clinical or pre-clinical Alzheimer's disease, Down's syndrome,
CC or clinical or pre-clinical cerebral amyloid angiopathy, and for
CC improving cognition in a subject. The present sequence represents
CC humanised antibody heavy chain variable region #3.
XX
SQ Sequence 442 AA;

Query Match 100.0%; Score 1263; DB 8; Length 442;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442
```

RESULT 98
AAE35327
ID AAE35327 standard; protein; 444 AA.
XX
AC AAE35327;
XX
DT 17-JUN-2003 (first entry)
XX
DE Humanised murine antibody BIWA4 heavy chain protein.

XX
KW CD44; cytotoxic drug; therapy; cancer; tumour; minimal residual disease;
KW antigen; cytostatic; BIWA4 antibody; murine.
XX
OS Homo sapiens.
XX
PN EP1258255-A1.
XX
PD 20-NOV-2002.
XX
PF 18-MAY-2001; 2001EP-00112227.
XX
PR 18-MAY-2001; 2001EP-00112227.
XX
PA (BOEH) BOEHRINGER INGELHEIM INT GMBH.
XX
PI Adolf G, Heider K, Patzelt E, Sproll M;
XX
DR WPI; 2003-177273/18.
DR N-PSDB; AAD53977.
XX
PT New compound useful for treatment of cancer comprises CD44 specific
PT antibody molecule conjugated to a highly cytotoxic drug, which cleaves
PT under intracellular conditions.
XX
PS Claim 7; Page 15-16; 31pp; English.
XX
CC The invention relates to a compound comprising CD44 specific antibody
CC molecule conjugated to a highly cytotoxic drug, which cleaves under
CC intracellular conditions. The compound is used in pharmaceutical
CC composition for the treatment of cancer, solid tumours, and as an
CC adjuvant to surgical intervention to treat minimal residual disease. The
CC present sequence is humanised murine antibody BIWA4 heavy chain protein
CC used in the invention
XX
SQ Sequence 444 AA;

Query Match 100.0%; Score 1263; DB 6; Length 444;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        213 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 272

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        273 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 332

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 392

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        393 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 444
```

RESULT 99
AAE34876
ID AAE34876 standard; protein; 444 AA.
XX
AC AAE34876;
XX
DT 28-MAY-2003 (first entry)
XX
DE BIWA4/8 antibody heavy chain mature protein.
XX
KW BIWA8 antibody; heavy chain variable region; light chain variable region;
KW VH; VL; CD44v6; medicament; cancer; antibody therapy.
XX
OS Unidentified.
XX
PN WO200294879-A1.
XX
PD 28-NOV-2002.
XX
PF 17-MAY-2002; 2002WO-EP005467.
XX
PR 18-MAY-2001; 2001EP-00112237.
PR 26-SEP-2001; 2001US-0325147P.
XX
PA (BOEH) BOEHRINGER INGELHEIM INT GMBH.
PA (BOEH) BOEHRINGER INGELHEIM PHARM INC.
XX
PI Adolf G, Ostermann E, Patzelt E, Sproll M, Heider K;
PI Miglietta JJ, Van Dongen AAMS;
XX
DR WPI; 2003-129413/12.
DR N-PSDB; AAD53212, AAD53215.
XX
PT New antibodies specific for an epitope coded by the variant exon of the
PT CD44 gene, useful for treating cancer, including non-small cell lung,
PT breast, head and neck, ovarian and lung cancer.
XX
PS Claim 24; Col 44; 78pp; English.
XX
CC The present invention relates to novel antibody molecules comprising a
CC variable region of the heavy (VH) and/or light chain (VL) of CD44v6
CC specific humanised antibody called BIWA8 and BIWA4. Sequences of the
CC invention are useful for manufacturing a medicament and for treating
CC cancer including colorectum, non-small cell lung, breast, head and neck,
CC ovarian, lung, bladder, pancreatic cancer or metastatic cancers of the
CC brain. They are also useful in antibody therapy. The present sequence is
CC BIWA4/8 antibody heavy chain mature protein. This sequence is used in the
CC exemplification of the invention
XX
SQ Sequence 444 AA;

Query Match 100.0%; Score 1263; DB 6; Length 444;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
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Db        213 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 272

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        273 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 332

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 392

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        393 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 444
```

RESULT 100
ADL15443
ID ADL15443 standard; protein; 444 AA.
XX
AC ADL15443;
XX
DT 06-MAY-2004 (first entry)
XX
DE Humanised murine antibody BIWA4/BIWA8 heavy chain protein.
XX
KW cancer; cell differentiation antigen-44; CD44; cytotoxic;
KW chemotherapeutic agent; cytostatic; head; neck squamous cell carcinoma;
KW oesophagus; lung; skin; cervix; breast adenocarcinoma; pancreas; colon;
KW stomach; human; murine; mouse; antibody; BIWA8; BIWA4; heavy chain.
XX
OS Homo sapiens.

OS Mus sp.
XX
PN EP1391213-A1.
XX
PD 25-FEB-2004.
XX
PF 21-AUG-2002; 2002EP-00018686.
XX
PR 21-AUG-2002; 2002EP-00018686.
XX
PA (BOEH) BOEHRINGER INGELHEIM INT GMBH.
XX
PI Adolf G, Baum A, Heider K;
XX
DR WPI; 2004-249201/24.
DR N-PSDB; ADL15444.
XX
PT Use of a conjugate of antibody to specified cell differentiation antigen
PT with cytotoxic compound in the preparation of pharmaceutical composition
PT for the treatment of cancer.
XX
PS Claim 7; SEQ ID NO 6; 52pp; English.
XX
CC The invention relates to a novel method for the preparation of a
CC pharmaceutical composition for the treatment of cancer whereby a
CC conjugate of a specific antibody to cell differentiation antigen-44
CC (CD44) with a cytotoxic compound is used optionally in combination with a
CC chemotherapeutic agent. The method of the invention has cytostatic
CC applications and may be useful in the preparation of a pharmaceutical
CC composition for the treatment of cancer, particularly head and neck
CC squamous cell carcinoma, oesophagus squamous cell carcinoma, lung
CC squamous cell carcinoma, skin squamous cell carcinoma, cervix squamous
CC cell carcinoma, breast adenocarcinoma, lung adenocarcinoma, pancreas
CC adenocarcinoma, colon adenocarcinoma and stomach adenocarcinoma. The
CC current sequence is that of the humanised murine antibody BIWA4/BIWA8
CC heavy chain protein of the invention.
XX
SQ Sequence 444 AA;

Query Match 100.0%; Score 1263; DB 8; Length 444;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        213 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 272

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        273 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 332

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 392

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        393 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 444
```

RESULT 101
ADO00851
ID ADO00851 standard; protein; 444 AA.
XX
AC ADO00851;
XX
DT 29-JUL-2004 (first entry)
XX
DE Humanised murine antibody BIWA 4 heavy chain protein SEQ ID NO:6.
XX
KW CD44 specific antibody; CD44; cancer; radiotherapy;
KW CD44v6 specific antibody; maytansinoid; radioimmunotherapeutic;
KW cytostatic; immunostimulator; head and neck squamous cell carcinoma;
KW oesophagus squamous cell carcinoma; lung squamous cell carcinoma;
KW skin squamous cell carcinoma; cervix squamous cell carcinoma;
KW breast adenocarcinoma; lung adenocarcinoma; pancreas adenocarcinoma;
KW colon adenocarcinoma; stomach adenocarcinoma;
KW humanised murine antibody BIWA 4 heavy chain.
XX
OS Mus sp.
OS Homo sapiens.
OS Synthetic.
XX
PN EP1417974-A1.
XX
PD 12-MAY-2004.
XX
PF 08-NOV-2002; 2002EP-00024881.
XX
PR 08-NOV-2002; 2002EP-00024881.
XX
PA (BOEH) BOEHRINGER INGELHEIM INT GMBH.
XX
DR WPI; 2004-378705/36.
DR N-PSDB; ADO00852.
XX
PT Use of compound comprising antibody molecule specific for CD 44, linker
PT moiety and compound toxic to cells, in combination with radiotherapy for
PT preparation of pharmaceutical composition for treatment of cancer.
XX
PS Claim 7; SEQ ID NO 6; 42pp; English.
XX
CC The present invention describes using a compound (CD) of formula A(LB)n,
CC where A is an antibody molecule which is specific for CD44, L is a linker
CC moiety, B is a compound which is toxic to cells, and n is a decimal
CC number between 1-10, for the preparation of a pharmaceutical composition
CC for the treatment of cancer, where CD is used or is for use in
CC combination with radiotherapy. Also described: (1) use of a conjugate
CC (CJ) of a CD44v6 specific antibody molecule and a maytansinoid for the
CC manufacture of a pharmaceutical composition for the treatment of cancer,
CC where CJ is used or is for use in combination with radiotherapy; (2) a
CC pharmaceutical composition comprising CD or CJ together with a
CC radioimmunotherapeutic agent and optionally further comprising one or
CC more carrier(s), diluent(s), or excipient(s); (3) a kit comprising, in a
CC separate pharmaceutical composition, CD or CJ and a
CC radioimmunotherapeutic agent; and (4) use of radioimmunotherapeutic agent
CC (RA) for the preparation of a pharmaceutical composition for the
CC treatment of cancer, where the radioimmunotherapeutic agent is used or is
CC for use in combination with CD or CJ. CD and CJ have cytostatic
CC activities, and can be used as immunostimulators. CJ is useful for the
CC manufacture of a medicament for the treatment of cancer e.g. head and
CC neck squamous cell carcinoma, oesophagus squamous cell carcinoma, lung
CC squamous cell carcinoma, skin squamous cell carcinoma, cervix squamous
CC cell carcinoma, breast adenocarcinoma, lung adenocarcinoma, pancreas
CC adenocarcinoma, colon adenocarcinoma, and stomach adenocarcinoma. CD and
CC CJ are useful for preparation of a pharmaceutical composition for the
CC treatment of cancer. CD and CJ are useful for treating cancer in a
CC patient which involves administering CD or CJ to the patient in
CC combination with radiotherapy. CD and CJ are useful as an adjuvant to
CC surgical interaction, to treat minimal residual disease. The present
CC sequence represents a humanised murine antibody BIWA 4 heavy chain, which
CC is used in the exemplification of the present invention.
XX
SQ Sequence 444 AA;

Query Match 100.0%; Score 1263; DB 8; Length 444;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        213 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 272

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        273 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 332
```

```
Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 392

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        393 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 444


RESULT 102
AAY24153
ID   AAY24153 standard; protein; 445 AA.
XX
AC   AAY24153;
XX
DT   17-OCT-2003  (revised)
DT   10-SEP-1999  (first entry)
XX
DE   Bovine LOX-1 extracellular region/human IgG1 Fc region chimeric protein.
XX
KW   LDL; denatured; oxidised; arteriosclerosis; hyperlipidaemia;
KW   low density lipoprotein; receptor; detection; immunoglobulin;
KW   fusion protein; chimeric protein.
XX
OS   Bos sp.
OS   Homo sapiens.
OS   Chimeric.
XX
PN   WO9932520-A1.
XX
PD   01-JUL-1999.
XX
PF   18-DEC-1998;   98WO-JP005744.
XX
PR   19-DEC-1997;   97JP-00364981.
PR   09-DEC-1998;   98JP-00349648.
PR   16-DEC-1998;   98JP-00358170.
XX
PA   (NISB ) JAPAN TOBACCO INC.
XX
PI   Sawamura T,  Kakutani M,  Masaki T;
XX
DR   WPI; 1999-418906/35.
DR   N-PSDB; AAX88529.
XX
PT   Fusion peptide for assay of oxidized LDL and for therapeutic use.
XX
PS   Claim 12; Page 75-79; 105pp; Japanese.
XX
CC   The present invention describes a fusion peptide which consists of the
CC   extracellular domain of a mammalian oxidized LDL (low density
CC   lipoprotein) receptor, fused to a partial heavy chain of a mammalian
CC   immunoglobulin containing all or part of the constant region. Oxidized
CC   LDL is a denatured form of LDL occurring in patients having
CC   arteriosclerosis or hyperlipidaemia, and the fusion peptide can be used
CC   for the assay of oxidized LDL in biological samples from such patients,
CC   for the diagnosis of the disorders. It can also be used therapeutically
CC   for the prevention and treatment of arteriosclerosis and hyperlipidaemia.
CC   The present sequence represents a chimeric protein comprising the bovine
CC   LOX-1 extracellular region and the human immunoglobulin IgG1 Fc region.
CC   (Updated on 17-OCT-2003 to standardise OS field)
XX
SQ   Sequence 445 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 445;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        214 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        274 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 393

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        394 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 445


RESULT 103
AAO31101
ID   AAO31101 standard; protein; 445 AA.
XX
AC   AAO31101;
XX
DT   06-OCT-2003  (first entry)
XX
DE   Human A2-G8 SCF antibody heavy chain variable and constant region.
XX
KW   Human; antibody; stem cell factor; mast cell growth factor; asthma; SCF;
KW   steel factor; c-kit ligand; gene therapy.
XX
OS   Homo sapiens.
XX
PN   WO2003051311-A2.
XX
PD   26-JUN-2003.
XX
PF   16-DEC-2002; 2002WO-US040227.
XX
PR   17-DEC-2001; 2001US-0342174P.
XX
PA   (FARB ) BAYER CORP.
XX
PI   Takeuchi T,  Tomkinson A,  Neben S;
XX
DR   WPI; 2003-523500/49.
XX
PT   New purified human antibody that binds to stem cell factor protein,
PT   useful for preparing a composition for treating asthma.
XX
PS   Claim 9; Page 47; 94pp; English.
XX
CC   The invention provides human antibodies that bind to stem cell factor
CC   (SCF) protein. SCF is also known as mast cell growth factor, steel factor
CC   or c-kit ligand. Antibodies of the invention are useful for preparing
CC   compositions for treating asthma. They are also used in gene therapy. The
CC   present sequence is human SCF antibody heavy chain variable and constant
CC   region
XX
SQ   Sequence 445 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 445;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        214 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        274 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 393

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
```

```
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       394 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 445

RESULT 104
ADF11421
ID   ADF11421 standard; protein; 445 AA.
XX
AC   ADF11421;
XX
DT   12-FEB-2004  (first entry)
XX
DE   2E11 anti-OPGL antibody heavy chain SEQ ID NO:34.
XX
KW   human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;
KW   osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;
KW   osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 140
FT                   /note= "encoded by TG"
XX
PN   WO2003086289-A2.
XX
PD   23-OCT-2003.
XX
PF   07-APR-2003; 2003WO-US010749.
XX
PR   05-APR-2002; 2002US-0370407P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Boyle WJ,  Medlock E,  Sullivan JK,  Elliott RL,  Martin F,  Huang H;
XX
DR   WPI; 2003-845253/78.
DR   N-PSDB; ADF11420.
XX
PT   New isolated antibody that specifically binds osteoprotegerin ligand,
PT   useful for diagnosing or treating bone disorders, such as osteoporosis,
PT   bone loss from arthritis, Paget's disease or osteopenia.
XX
PS   Claim 13; SEQ ID NO 34; 156pp; English.
XX
CC   The present invention describes an isolated human antibody (I) that
CC   specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a
CC   pharmaceutical composition comprising a pharmaceutical carrier and a
CC   therapeutic amount of (I); (2) methods of treating an osteopenic disorder
CC   in a patient, comprising administering to a patient the pharmaceutical
CC   composition of (1) or a pharmaceutical amount of (I); and (3) a method
CC   for detecting OPGL in a biological sample, comprising contacting the
CC   sample with (I) under conditions that allow for binding of the antibody
CC   to OPGL, and measuring the level of bound antibody in the sample. (I) has
CC   osteopathic, antiarthritic and cytostatic activities, and can be used in
CC   gene therapy. The composition and methods are useful in diagnosing or
CC   treating bone disorders, such as osteoporosis, bone loss from arthritis,
CC   Paget's disease or osteopenia. The antibody (I) may also be used for
CC   detecting OPGL in biological samples and in identifying cells or tissues
CC   that produce the protein. The present sequence represents a sequence
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence 445 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 445;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       214 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273

Qy        61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       274 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333

Qy       121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 393

Qy       181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       394 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 445

RESULT 105
ADF11429
ID   ADF11429 standard; protein; 445 AA.
XX
AC   ADF11429;
XX
DT   12-FEB-2004  (first entry)
XX
DE   18B2 anti-OPGL antibody heavy chain SEQ ID NO:42.
XX
KW   human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;
KW   osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;
KW   osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 140
FT                   /note= "encoded by TG"
XX
PN   WO2003086289-A2.
XX
PD   23-OCT-2003.
XX
PF   07-APR-2003; 2003WO-US010749.
XX
PR   05-APR-2002; 2002US-0370407P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Boyle WJ,  Medlock E,  Sullivan JK,  Elliott RL,  Martin F,  Huang H;
XX
DR   WPI; 2003-845253/78.
DR   N-PSDB; ADF11428.
XX
PT   New isolated antibody that specifically binds osteoprotegerin ligand,
PT   useful for diagnosing or treating bone disorders, such as osteoporosis,
PT   bone loss from arthritis, Paget's disease or osteopenia.
XX
PS   Claim 13; SEQ ID NO 42; 156pp; English.
XX
CC   The present invention describes an isolated human antibody (I) that
CC   specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a
CC   pharmaceutical composition comprising a pharmaceutical carrier and a
CC   therapeutic amount of (I); (2) methods of treating an osteopenic disorder
CC   in a patient, comprising administering to a patient the pharmaceutical
CC   composition of (1) or a pharmaceutical amount of (I); and (3) a method
CC   for detecting OPGL in a biological sample, comprising contacting the
CC   sample with (I) under conditions that allow for binding of the antibody
CC   to OPGL, and measuring the level of bound antibody in the sample. (I) has
CC   osteopathic, antiarthritic and cytostatic activities, and can be used in
CC   gene therapy. The composition and methods are useful in diagnosing or
CC   treating bone disorders, such as osteoporosis, bone loss from arthritis,
CC   Paget's disease or osteopenia. The antibody (I) may also be used for
CC   detecting OPGL in biological samples and in identifying cells or tissues
CC   that produce the protein. The present sequence represents a sequence
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence 445 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 445;
```

```
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        214 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        274 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 393

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        394 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 445


RESULT 106
AAW05829
ID   AAW05829 standard; protein; 446 AA.
XX
AC   AAW05829;.
XX
DT   16-OCT-2003  (revised)
DT   27-JAN-1997  (first entry)
XX
DE   Humanised 1D10 antibody heavy chain.
XX
KW   B-cell lymphoma; humanised antibody; bispecific antibody; myeloma;
KW   leukaemia; hybridoma; monoclonal antibody.
XX
OS   Homo; sapiens.
OS   Mus sp.
OS   Chimeric.
XX
FH   Key             Location/Qualifiers
FT   Domain          1. .116
FT                   /label= Variable_domain
FT   Region          31. .35
FT                   /label= CDR1
FT   Region          50. .65
FT                   /label= CDR2
FT   Region          98. .105
FT                   /label= CDR3
FT   Domain          117. .214
FT                   /label= CH1
FT   Domain          215. .229
FT                   /label= Hinge
FT   Domain          230. .339
FT                   /label= CH2
FT   Domain          340. .446
FT                   /label= CH3
XX
PN   WO9626964-A1.
XX
PD   06-SEP-1996.
XX
PF   29-FEB-1996;   96WO-US002754.
XX
PR   01-MAR-1995;   95US-00397411.
XX
PA   (PROT-) PROTEIN DESIGN LABS INC.
PA   (IOWA-) IOWA IMMUNOTHERAPY INVESTIGATORS.
XX
PI   Weiner G,  Gingrich R,  Link BK,  Tso JY;
XX
DR   WPI; 1996-412742/41.
XX
PT   New bi-specific antibody reactive with both T or NK cells and malignant B
PT   cells - also their humanised forms and hybridomas producing them, useful
PT   for treating or preventing leukaemia, lymphoma and myeloma.
XX
PS   Example 4; Fig 4e; 85pp; English.
XX
CC   The humanised 1D10 antibody heavy chain (AAW05829) includes a variable
CC   region (see also AAW05823) consisting of human R3.5HG heavy chain
CC   variable region framework and complementarity determining regions from
CC   the murine 1D10 antibody specific for a 28/32 kDa antigen found on the
CC   surface of malignant B-cells. It can be coexpressed with humanised 1D10
CC   light chain (see also AAW05828) in mammalian host cells. Bispecific
CC   antibodies can be constructed that include a first binding fragment
CC   comprising humanised M291 heavy and light chain variable regions (see
CC   also AAW05826, AAW05830), and a second binding fragment comprising
CC   humanised 1D10 heavy and light chain variable regions. Such antibodies
CC   are reactive with both T or NK cells and malignant B cells, and have
CC   therapeutic and diagnostic applns. (Updated on 16-OCT-2003 to standardise
CC   OS field)
XX
SQ   Sequence 446 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 446;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 107
ADF11425
ID   ADF11425 standard; protein; 446 AA.
XX
AC   ADF11425;
XX
DT   12-FEB-2004  (first entry)
XX
DE   2D8 anti-OPGL antibody heavy chain SEQ ID NO:38.
XX
KW   human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;
KW   osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;
KW   osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 141
FT                   /note= "encoded by TG"
XX
PN   WO2003086289-A2.
XX
PD   23-OCT-2003.
XX
PF   07-APR-2003; 2003WO-US010749.
XX
PR   05-APR-2002; 2002US-0370407P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Boyle WJ,  Medlock E,  Sullivan JK,  Elliott RL,  Martin F,  Huang H;
XX
```

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DR   WPI; 2003-845253/78.
DR   N-PSDB; ADF11424.
XX
PT   New isolated antibody that specifically binds osteoprotegerin ligand,
PT   useful for diagnosing or treating bone disorders, such as osteoporosis,
PT   bone loss from arthritis, Paget's disease or osteopenia.
XX
PS   Claim 11; SEQ ID NO 38; 156pp; English.
XX
CC   The present invention describes an isolated human antibody (I) that
CC   specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a
CC   pharmaceutical composition comprising a pharmaceutical carrier and a
CC   therapeutic amount of (I); (2) methods of treating an osteopenic disorder
CC   in a patient, comprising administering to a patient the pharmaceutical
CC   composition of (1) or a pharmaceutical amount of (I); and (3) a method
CC   for detecting OPGL in a biological sample, comprising contacting the
CC   sample with (I) under conditions that allow for binding of the antibody
CC   to OPGL, and measuring the level of bound antibody in the sample. (I) has
CC   osteopathic, antiarthritic and cytostatic activities, and can be used in
CC   gene therapy. The composition and methods are useful in diagnosing or
CC   treating bone disorders, such as osteoporosis, bone loss from arthritis,
CC   Paget's disease or osteopenia. The antibody (I) may also be used for
CC   detecting OPGL in biological samples and in identifying cells or tissues
CC   that produce the protein. The present sequence represents a sequence
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence 446 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 446;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 108
ADF11437
ID   ADF11437 standard; protein; 446 AA.
XX
AC   ADF11437;
XX
DT   12-FEB-2004  (first entry)
XX
DE   9H7 anti-OPGL antibody heavy chain SEQ ID NO:50.
XX
KW   human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;
KW   osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;
KW   osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 141
FT                   /note= "encoded by TG"
XX
PN   WO2003086289-A2.
XX
PD   23-OCT-2003.
XX
PF   07-APR-2003; 2003WO-US010749.
XX
PR   05-APR-2002; 2002US-0370407P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Boyle WJ,  Medlock E,  Sullivan JK,  Elliott RL,  Martin F,  Huang H;
XX
DR   WPI; 2003-845253/78.
DR   N-PSDB; ADF11436.
XX
PT   New isolated antibody that specifically binds osteoprotegerin ligand,
PT   useful for diagnosing or treating bone disorders, such as osteoporosis,
PT   bone loss from arthritis, Paget's disease or osteopenia.
XX
PS   Claim 11; SEQ ID NO 50; 156pp; English.
XX
CC   The present invention describes an isolated human antibody (I) that
CC   specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a
CC   pharmaceutical composition comprising a pharmaceutical carrier and a
CC   therapeutic amount of (I); (2) methods of treating an osteopenic disorder
CC   in a patient, comprising administering to a patient the pharmaceutical
CC   composition of (1) or a pharmaceutical amount of (I); and (3) a method
CC   for detecting OPGL in a biological sample, comprising contacting the
CC   sample with (I) under conditions that allow for binding of the antibody
CC   to OPGL, and measuring the level of bound antibody in the sample. (I) has
CC   osteopathic, antiarthritic and cytostatic activities, and can be used in
CC   gene therapy. The composition and methods are useful in diagnosing or
CC   treating bone disorders, such as osteoporosis, bone loss from arthritis,
CC   Paget's disease or osteopenia. The antibody (I) may also be used for
CC   detecting OPGL in biological samples and in identifying cells or tissues
CC   that produce the protein. The present sequence represents a sequence
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence 446 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 446;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 109
ADF11433
ID   ADF11433 standard; protein; 446 AA.
XX
AC   ADF11433;
XX
DT   12-FEB-2004  (first entry)
XX
DE   16E1 anti-OPGL antibody heavy chain SEQ ID NO:46.
XX
KW   human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;
KW   osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;
KW   osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.
XX
OS   Homo sapiens.
XX
```

```
FH   Key             Location/Qualifiers
FT   Misc-difference 141
FT                   /note= "encoded by TG"
XX
PN   WO2003086289-A2.
XX
PD   23-OCT-2003.
XX
PF   07-APR-2003; 2003WO-US010749.
XX
PR   05-APR-2002; 2002US-0370407P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Boyle WJ,  Medlock E,  Sullivan JK,  Elliott RL,  Martin F,  Huang H;
XX
DR   WPI; 2003-845253/78.
DR   N-PSDB; ADF11432.
XX
PT   New isolated antibody that specifically binds osteoprotegerin ligand,
PT   useful for diagnosing or treating bone disorders, such as osteoporosis,
PT   bone loss from arthritis, Paget's disease or osteopenia.
XX
PS   Claim 11; SEQ ID NO 46; 156pp; English.
XX
CC   The present invention describes an isolated human antibody (I) that
CC   specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a
CC   pharmaceutical composition comprising a pharmaceutical carrier and a
CC   therapeutic amount of (I); (2) methods of treating an osteopenic disorder
CC   in a patient, comprising administering to a patient the pharmaceutical
CC   composition of (1) or a pharmaceutical amount of (I); and (3) a method
CC   for detecting OPGL in a biological sample, comprising contacting the
CC   sample with (I) under conditions that allow for binding of the antibody
CC   to OPGL, and measuring the level of bound antibody in the sample. (I) has
CC   osteopathic, antiarthritic and cytostatic activities, and can be used in
CC   gene therapy. The composition and methods are useful in diagnosing or
CC   treating bone disorders, such as osteoporosis, bone loss from arthritis,
CC   Paget's disease or osteopenia. The antibody (I) may also be used for
CC   detecting OPGL in biological samples and in identifying cells or tissues
CC   that produce the protein. The present sequence represents a sequence
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence 446 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 446;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 110
ADF11417
ID   ADF11417 standard; protein; 446 AA.
XX
AC   ADF11417;
XX
DT   12-FEB-2004  (first entry)
XX
DE   22B3 anti-OPGL antibody heavy chain SEQ ID NO:30.
XX
KW   human; antibody; osteoprotegerin ligand; OPGL; osteopenic disorder;
KW   osteopathic; antiarthritic; cytostatic; gene therapy; bone disorder;
KW   osteoporosis; bone loss; arthritis; Paget's disease; osteopenia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 141
FT                   /note= "encoded by TG"
XX
PN   WO2003086289-A2.
XX
PD   23-OCT-2003.
XX
PF   07-APR-2003; 2003WO-US010749.
XX
PR   05-APR-2002; 2002US-0370407P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Boyle WJ,  Medlock E,  Sullivan JK,  Elliott RL,  Martin F,  Huang H;
XX
DR   WPI; 2003-845253/78.
DR   N-PSDB; ADF11416.
XX
PT   New isolated antibody that specifically binds osteoprotegerin ligand,
PT   useful for diagnosing or treating bone disorders, such as osteoporosis,
PT   bone loss from arthritis, Paget's disease or osteopenia.
XX
PS   Claim 11; SEQ ID NO 30; 156pp; English.
XX
CC   The present invention describes an isolated human antibody (I) that
CC   specifically binds osteoprotegerin ligand (OPGL). Also described: (1) a
CC   pharmaceutical composition comprising a pharmaceutical carrier and a
CC   therapeutic amount of (I); (2) methods of treating an osteopenic disorder
CC   in a patient, comprising administering to a patient the pharmaceutical
CC   composition of (1) or a pharmaceutical amount of (I); and (3) a method
CC   for detecting OPGL in a biological sample, comprising contacting the
CC   sample with (I) under conditions that allow for binding of the antibody
CC   to OPGL, and measuring the level of bound antibody in the sample. (I) has
CC   osteopathic, antiarthritic and cytostatic activities, and can be used in
CC   gene therapy. The composition and methods are useful in diagnosing or
CC   treating bone disorders, such as osteoporosis, bone loss from arthritis,
CC   Paget's disease or osteopenia. The antibody (I) may also be used for
CC   detecting OPGL in biological samples and in identifying cells or tissues
CC   that produce the protein. The present sequence represents a sequence
CC   which is used in the exemplification of the present invention.
XX
SQ   Sequence 446 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 446;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446
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RESULT 111
ADR19328
ID   ADR19328 standard; protein; 446 AA.
XX
AC   ADR19328;
XX
DT   21-OCT-2004  (first entry)
XX
DE   Chimeric mouse/human antibody IgG1 gamma heavy chain, cIgG-Panko2.
XX
KW   Recognition molecule; bind; glycosylated MUC1 tumour epitope; mucin 1;
KW   tumour; metastatic; carcinoma; breast; colon; stomach; pancreas; ovary;
KW   liver; kidney cell; intestinal; lung cancer; multiple myeloma; murine;
KW   mouse; human; heavy chain; gamma; chimeric.
XX
OS   Mus sp.
OS   Homo sapiens.
XX
PN   WO2004065423-A2.
XX
PD   05-AUG-2004.
XX
PF   23-JAN-2004; 2004WO-DE000132.
XX
PR   23-JAN-2003; 2003DE-01003664.
XX
PA   (NEMO-) NEMOD BIOTHERAPEUTICS GMBH & CO KG.
XX
PI   Goletz S,  Danielczyk A,  Stahn R,  Karsten U;
XX
DR   WPI; 2004-593433/57.
XX
PT   New recognition molecules that bind the glycosylated MUC1 tumor epitope,
PT   useful for prevention, diagnosis, treatment and monitoring of tumors.
XX
PS   Claim 29; SEQ ID NO 65; 158pp; German.
XX
CC   The invention relates to novel recognition molecules comprising sequences
CC   that bind specifically to a glycosylated MUC1 tumour epitope. The novel
CC   recognition molecules comprise: sequences ADR19264 or ADR19265; sequences
CC   ADR19266 or ADR19267 and sequences ADR19268 and ADR19269, and bind
CC   specifically to the glycosylated mucin 1 (MUC1) tumour epitope. The
CC   invention further comprises: a construct comprising the recognition
CC   molecule fused, chemically coupled or non-covalently associated with
CC   additional sequences and/or structures; an isolated nucleic acid that
CC   encodes the recognition molecule or construct; expression cassette or
CC   vector that contains the isolated nucleic acid, operatively linked to a
CC   promoter; virus or host cell comprising at least one cassette or vector
CC   of ADR19266; an organism containing at least one host cell of ADR19267; a
CC   method for preparing the recognition molecule and construct; and a kit
CC   containing the recognition molecule and/or construct. The recognition
CC   molecules have cytostatic activity. The recognition molecules, constructs
CC   containing them, the nucleic acid encoding them, and derived viruses,
CC   cells and organisms, are used for prevention, diagnosis, treatment and
CC   monitoring of tumours and/or metastases, specifically where MUC1
CC   positive, particularly carcinoma of breast, colon, stomach, pancreas,
CC   ovary, liver or kidney cells; (gastro)intestinal or lung cancers and
CC   multiple myeloma. The recognition molecules show little or no binding to
CC   MUC1 in either the serum or normal tissue, so provides simple, safe and
CC   efficient detection of tumours, even at an early stage (carcinoma in
CC   situ), and can differentiate between tumours and benign diseases. This
CC   sequence represents a chimeric murine/human antibody chain used in the
CC   creation of the novel recognition molecules of the invention.
XX
SQ   Sequence 446 AA;

  Query Match           100.0%;  Score 1263;  DB 8;  Length 446;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 112
AAY31669
ID   AAY31669 standard; protein; 447 AA.
XX
AC   AAY31669;
XX
DT   09-NOV-1999  (first entry)
XX
DE   Human IgG1 chain C.
XX
KW   IgG1; C-gamma-1; antibody; fusion protein; circulating half-life; human;
KW   drug delivery.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1. .117
FT                   /note= "the identity of these residues is not specified"
XX
PN   WO9943713-A1.
XX
PD   02-SEP-1999.
XX
PF   24-FEB-1999;   99WO-US003966.
XX
PR   25-FEB-1998;   98US-0075887P.
XX
PA   (LEXI-) LEXIGEN PHARM CORP.
XX
PI   Gillies SD,  Lo K,  Lan Y,  Wesolowski J;
XX
DR   WPI; 1999-527594/44.
XX
PT   New antibody-based fusion proteins, used for the delivery of e.g. a
PT   cytokine, ligand-binding protein or protein toxin to target cells in
PT   vivo.
XX
PS   Disclosure; Page 31-32; 41pp; English.
XX
CC   The present sequence represents the constant region of human IgG isotype
CC   1 (IgG1, C-gamma-1). C-gamma-1 and C-gamma-3 (see AAY31671) bind Fc
CC   receptors with high affinity, whereas C-gamma-4 (see AAY31672) has 10-
CC   fold lower binding affinity and C-gamma-2 (see AAY31670) does not bind to
CC   Fc receptor gamma-I. The invention provides methods for the genetic
CC   construction and expression of antibody-based fusion proteins with
CC   enhanced circulating half-lives. The fusion proteins lack the ability to
CC   bind to immunoglobulin Fc receptors, either as a consequence of the
CC   antibody isotype used for protein construction, i.e. a C-gamma-2 constant
CC   region (Fc) or a C-gamma-4 Fc receptor, or through directed mutagenesis
CC   of antibody isotypes that normally bind Fc receptors, i.e. C-gamma-1 or C
CC   -gamma-3. Introduction of a mutation or a deletion at one or more amino
CC   acid of C-gamma-1 selected from Leu234, Leu235, Gly236, Gly237, Asn297,
CC   and Pro331, produces an Ig heavy chain having reduced binding affinity
CC   for an Fc receptor. The methods can be used for increasing the
CC   circulating half-life of a non-Ig protein such as a cytokine, e.g. tumour
CC   necrosis factor (TNF), an interleukin or a lymphokine such as a
CC   lymphotoxin or a colony stimulating factor, a ligand-binding protein,
CC   e.g. CD4, CTLA-4, TNF receptor or an interleukin receptor, or a protein
CC   toxin (claimed). The fusion proteins are used to deliver selectively the
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CC   second non-Ig protein to a target cell in vivo so that the second non-Ig
CC   protein can exert a localised biological effect
XX
SQ   Sequence 447 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 113
ADL35333
ID   ADL35333 standard; protein; 447 AA.
XX
AC   ADL35333;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human anti-Fcgamma receptor IIIa antibody-related protein - SEQ 90.
XX
KW   antibody binding; Fcgamma receptor IIIa; Fc region sugar chain;
KW   cytostatic; antiallergic; antiinflammatory; immunosuppressive;
KW   vasotropic; virucide; cancer; allergy; inflammatory; autoimmune;
KW   circulatory; viral infection; human.
XX
OS   Homo sapiens.
XX
PN   WO2003085119-A1.
XX
PD   16-OCT-2003.
XX
PF   09-APR-2003; 2003WO-JP004504.
XX
PR   09-APR-2002; 2002JP-00106950.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI   Nakamura K,  Shitara K;
XX
DR   WPI; 2003-812729/76.
DR   N-PSDB; ADL35332.
XX
PT   Method of enhancing the binding activity of antibody to Fc-gamma receptor
PT   IIIa for production of antibodies with high cytotoxicity as cancer,
PT   allergic, viral and other disease therapeutic agents.
XX
PS   Example 14; SEQ ID NO 90; 296pp; Japanese.
XX
CC   The invention relates to a novel method for enhancing the binding
CC   activity of an antibody to the Fcgamma receptor IIIa by increasing the
CC   proportion of N-glycoside bond type complex sugar chains attached to the
CC   Fc region of the antibody which do not have the 1-position of fucose
CC   bound to the 6-position of N-acetylglucosamine at the reducing end of the
CC   sugar chain. The method of the invention has cytostatic, antiallergic,
CC   antiinflammatory, immunosuppressive, vasotropic and virucide applications
CC   and may be useful for generating antibodies to be used in the treatment,
CC   prevention and diagnosis of diseases including cancer, allergies,
CC   inflammatory disorders, autoimmune diseases, circulatory disorders and
CC   viral infections. The current sequence is that of an anti-Fcgamma
CC   receptor IIIa antibody-related protein of the invention.
XX
SQ   Sequence 447 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 114
ADQ31274
ID   ADQ31274 standard; protein; 447 AA.
XX
AC   ADQ31274;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Humanised murine 11K2 heavy chain antibody protein (version 1) SeqID 40.
XX
KW   11K2; monocyte chemotactic protein; beta-chemokine family;
KW   glomerulonephritis; scleroderma; cirrhosis; multiple sclerosis;
KW   lupus nephritis; atherosclerosis; inflammatory bowel disease;
KW   rheumatoid arthritis; inflammatory disease; fibrotic disorder; cancer;
KW   immunopathological disorder; antiarteriosclerotic; antiarthritic;
KW   antiinflammatory; antirheumatic; cytostatic; dermatological;
KW   hepatotropic; immunomodulator; nephrotropic; neuroprotective; mouse; MCP;
KW   murine; humanised antibody.
XX
OS   Mus musculus.
OS   Synthetic.
XX
PN   WO2004050836-A2.
XX
PD   17-JUN-2004.
XX
PF   25-NOV-2003; 2003WO-US037834.
XX
PR   27-NOV-2002; 2002US-0430007P.
XX
PA   (BIOG-) BIOGEN IDEC MA INC.
XX
PI   De Fougerolles AR,  Kotelianski VE,  Garber E,  Reid C,  Saldanha JW;
PI   Van Vlijmen H;
XX
DR   WPI; 2004-461110/43.
DR   N-PSDB; ADQ31273.
XX
PT   New antibodies against monocyte chemotactic proteins (MCP), useful for
PT   treating or preventing disorders associated with detrimental MCP
PT   activity, e.g. glomerulonephritis, scleroderma, multiple sclerosis, or
PT   atherosclerosis.
XX
PS   Disclosure; SEQ ID NO 40; 200pp; English.
XX
CC   This invention relates to an antibody for treating or preventing
```

```
CC   disorders associated with detrimental monocyte chemotactic protein (MCP)
CC   activity. Specifically, it refers to humanised antibodies that bind to
CC   members of the beta-chemokine family (of which MCP-1, MCP-2 and MCP-3
CC   belong) and in particular antibodies that have been modelled on, and
CC   modified from, the variable complementarity determining regions (CDRs) of
CC   the murine 11K2 and 1A1 immunoglobulin sequences. The present invention
CC   describes using these antibodies to treat or prevent diseases and
CC   disorders including glomerulonephritis, scleroderma, cirrhosis, multiple
CC   sclerosis, lupus nephritis, atherosclerosis, inflammatory bowel diseases,
CC   rheumatoid arthritis, inflammatory diseases, fibrotic disorders, cancer
CC   and immunopathological disorders. Accordingly, they can be used in the
CC   development of pharmaceutical compositions that exhibit
CC   antiarteriosclerotic, antiarthritic, antiinflammatory, antirheumatic,
CC   cytostatic, dermatological, hepatotropic, immunomodulator, nephrotropic
CC   and neuroprotective activities. This polypeptide sequence is the
CC   humanised murine 11K2 variable and constant heavy chain antibody protein
CC   (version 1) of the invention.
XX
SQ   Sequence 447 AA;

  Query Match           100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 115
ADQ31271
ID   ADQ31271 standard; protein; 447 AA.
XX
AC   ADQ31271;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Murine 11K2 variable & constant heavy chain antibody protein SeqID 37.
XX
KW   11K2; monocyte chemotactic protein; beta-chemokine family;
KW   glomerulonephritis; scleroderma; cirrhosis; multiple sclerosis;
KW   lupus nephritis; atherosclerosis; inflammatory bowel disease;
KW   rheumatoid arthritis; inflammatory disease; fibrotic disorder; cancer;
KW   immunopathological disorder; antiarteriosclerotic; antiarthritic;
KW   antiinflammatory; antirheumatic; cytostatic; dermatological;
KW   hepatotropic; immunomodulator; nephrotropic; neuroprotective; mouse; MCP;
KW   murine; antibody.
XX
OS   Mus musculus.
XX
PN   WO2004050836-A2.
XX
PD   17-JUN-2004.
XX
PF   25-NOV-2003; 2003WO-US037834.
XX
PR   27-NOV-2002; 2002US-0430007P.
XX
PA   (BIOG-) BIOGEN IDEC MA INC.
XX
PI   De Fougerolles AR,  Kotelianski VE,  Garber E,  Reid C,  Saldanha JW;
PI   Van Vlijmen H;
XX
DR   WPI; 2004-461110/43.
DR   N-PSDB; ADQ31269.
XX
PT   New antibodies against monocyte chemotactic proteins (MCP), useful for
PT   treating or preventing disorders associated with detrimental MCP
PT   activity, e.g. glomerulonephritis, scleroderma, multiple sclerosis, or
PT   atherosclerosis.
XX
PS   Disclosure; SEQ ID NO 37; 200pp; English.
XX
CC   This invention relates to an antibody for treating or preventing
CC   disorders associated with detrimental monocyte chemotactic protein (MCP)
CC   activity. Specifically, it refers to humanised antibodies that bind to
CC   members of the beta-chemokine family (of which MCP-1, MCP-2 and MCP-3
CC   belong) and in particular antibodies that have been modelled on, and
CC   modified from, the variable complementarity determining regions (CDRs) of
CC   the murine 11K2 and 1A1 immunoglobulin sequences. The present invention
CC   describes using these antibodies to treat or prevent diseases and
CC   disorders including glomerulonephritis, scleroderma, cirrhosis, multiple
CC   sclerosis, lupus nephritis, atherosclerosis, inflammatory bowel diseases,
CC   rheumatoid arthritis, inflammatory diseases, fibrotic disorders, cancer
CC   and immunopathological disorders. Accordingly, they can be used in the
CC   development of pharmaceutical compositions that exhibit
CC   antiarteriosclerotic, antiarthritic, antiinflammatory, antirheumatic,
CC   cytostatic, dermatological, hepatotropic, immunomodulator, nephrotropic
CC   and neuroprotective activities. This polypeptide sequence is the murine
CC   11K2 variable and constant domains heavy chain antibody protein of the
CC   invention.
XX
SQ   Sequence 447 AA;

  Query Match           100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 116
ADQ31276
ID   ADQ31276 standard; protein; 447 AA.
XX
AC   ADQ31276;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Humanised murine 11K2 heavy chain antibody protein (version 2) SeqID 42.
XX
KW   11K2; monocyte chemotactic protein; beta-chemokine family;
KW   glomerulonephritis; scleroderma; cirrhosis; multiple sclerosis;
KW   lupus nephritis; atherosclerosis; inflammatory bowel disease;
KW   rheumatoid arthritis; inflammatory disease; fibrotic disorder; cancer;
KW   immunopathological disorder; antiarteriosclerotic; antiarthritic;
KW   antiinflammatory; antirheumatic; cytostatic; dermatological;
KW   hepatotropic; immunomodulator; nephrotropic; neuroprotective; mouse; MCP;
KW   murine; humanised antibody.
XX
```

OS Mus musculus.
OS Synthetic.
XX
PN WO2004050836-A2.
XX
PD 17-JUN-2004.
XX
PF 25-NOV-2003; 2003WO-US037834.
XX
PR 27-NOV-2002; 2002US-0430007P.
XX
PA (BIOG-) BIOGEN IDEC MA INC.
XX
PI De Fougerolles AR, Kotelianski VE, Garber E, Reid C, Saldanha JW;
PI Van Vlijmen H;
XX
DR WPI; 2004-461110/43.
DR N-PSDB; ADQ31275.
XX
PT New antibodies against monocyte chemotactic proteins (MCP), useful for
PT treating or preventing disorders associated with detrimental MCP
PT activity, e.g. glomerulonephritis, scleroderma, multiple sclerosis, or
PT atherosclerosis.
XX
PS Disclosure; SEQ ID NO 42; 200pp; English.
XX
CC This invention relates to an antibody for treating or preventing
CC disorders associated with detrimental monocyte chemotactic protein (MCP)
CC activity. Specifically, it refers to humanised antibodies that bind to
CC members of the beta-chemokine family (of which MCP-1, MCP-2 and MCP-3
CC belong) and in particular antibodies that have been modelled on, and
CC modified from, the variable complementarity determining regions (CDRs) of
CC the murine 11K2 and 1A1 immunoglobulin sequences. The present invention
CC describes using these antibodies to treat or prevent diseases and
CC disorders including glomerulonephritis, scleroderma, cirrhosis, multiple
CC sclerosis, lupus nephritis, atherosclerosis, inflammatory bowel diseases,
CC rheumatoid arthritis, inflammatory diseases, fibrotic disorders, cancer
CC and immunopathological disorders. Accordingly, they can be used in the
CC development of pharmaceutical compositions that exhibit
CC antiarteriosclerotic, antiarthritic, antiinflammatory, antirheumatic,
CC cytostatic, dermatological, hepatotropic, immunomodulator, nephrotropic
CC and neuroprotective activities. This polypeptide sequence is the
CC humanised murine 11K2 variable and constant heavy chain antibody protein
CC (version 2) of the invention.
XX
SQ Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 8; Length 447;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447
```

RESULT 117
ADQ66378
ID ADQ66378 standard; protein; 447 AA.
XX
AC ADQ66378;
XX
DT 07-OCT-2004 (first entry)
XX
DE Novel human protein sequence #1351.
XX
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW gene therapy; diagnostic marker; morbid state; osteoporosis;
KW neurological disease; Alzheimer's disease; Parkinson's disease; dementia;
KW cancer.
XX
OS Homo sapiens.
XX
PN EP1440981-A2.
XX
PD 28-JUL-2004.
XX
PF 21-JAN-2004; 2004EP-00001196.
XX
PR 21-JAN-2003; 2003JP-00102206.
PR 09-MAY-2003; 2003JP-00131392.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Nagai K, Irie R;
XX
DR WPI; 2004-535376/52.
DR N-PSDB; ADQ64190.
XX
PT Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS Claim 1; SEQ ID NO 3539; 2449pp; English.
XX
CC The invention relates to 2495 novel polynucleotides (I) and their encoded
CC polypeptides, sequences hybridizing to these nucleotides, sequences
CC encoding partial polypeptides and sequences having 70% or 90% identity to
CC the nucleotide and protein sequences. The nucleotides and polypeptides
CC are useful as diagnostic markers or therapeutic target for the diseases
CC or morbid states. They are also useful for treating osteoporosis,
CC neurological diseases, Alzheimer's diseases, Parkinson's diseases,
CC dementia and various cancers. This sequence corresponds to a protein
CC sequence of the invention.
XX
SQ Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 8; Length 447;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447
```

RESULT 118
ADR19327
ID ADR19327 standard; protein; 447 AA.
XX
AC ADR19327;
XX

DT 21-OCT-2004 (first entry)
XX
DE Chimeric mouse/human antibody IgG1 gamma heavy chain, cIgG-Panko1.
XX
KW Recognition molecule; bind; glycosylated MUC1 tumour epitope; mucin 1;
KW tumour; metastatic; carcinoma; breast; colon; stomach; pancreas; ovary;
KW liver; kidney cell; intestinal; lung cancer; multiple myeloma; murine;
KW mouse; human; heavy chain; gamma; chimeric.
XX
OS Mus sp.
OS Homo sapiens.
XX
PN WO2004065423-A2.
XX
PD 05-AUG-2004.
XX
PF 23-JAN-2004; 2004WO-DE000132.
XX
PR 23-JAN-2003; 2003DE-01003664.
XX
PA (NEMO-) NEMOD BIOTHERAPEUTICS GMBH & CO KG.
XX
PI Goletz S, Danielczyk A, Stahn R, Karsten U;
XX
DR WPI; 2004-593433/57.
XX
PT New recognition molecules that bind the glycosylated MUC1 tumor epitope,
PT useful for prevention, diagnosis, treatment and monitoring of tumors.
XX
PS Claim 28; SEQ ID NO 64; 158pp; German.
XX
CC The invention relates to novel recognition molecules comprising sequences
CC that bind specifically to a glycosylated MUC1 tumour epitope. The novel
CC recognition molecules comprise: sequences ADR19264 or ADR19265; sequences
CC ADR19266 or ADR19267 and sequences ADR19268 and ADR19269, and bind
CC specifically to the glycosylated mucin 1 (MUC1) tumour epitope. The
CC invention further comprises: a construct comprising the recognition
CC molecule fused, chemically coupled or non-covalently associated with
CC additional sequences and/or structures; an isolated nucleic acid that
CC encodes the recognition molecule or construct; expression cassette or
CC vector that contains the isolated nucleic acid, operatively linked to a
CC promoter; virus or host cell comprising at least one cassette or vector
CC of ADR19266; an organism containing at least one host cell of ADR19267; a
CC method for preparing the recognition molecule and construct; and a kit
CC containing the recognition molecule and/or construct. The recognition
CC molecules have cytostatic activity. The recognition molecules, constructs
CC containing them, the nucleic acid encoding them, and derived viruses,
CC cells and organisms, are used for prevention, diagnosis, treatment and
CC monitoring of tumours and/or metastases, specifically where MUC1
CC positive, particularly carcinoma of breast, colon, stomach, pancreas,
CC ovary, liver or kidney cells; (gastro)intestinal or lung cancers and
CC multiple myeloma. The recognition molecules show little or no binding to
CC MUC1 in either the serum or normal tissue, so provides simple, safe and
CC efficient detection of tumours, even at an early stage (carcinoma in
CC situ), and can differentiate between tumours and benign diseases. This
CC sequence represents a chimeric murine/human antibody chain used in the
CC creation of the novel recognition molecules of the invention.
XX
SQ Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 8; Length 447;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447

RESULT 119
ADS87928
ID ADS87928 standard; protein; 447 AA.
XX
AC ADS87928;
XX
DT 18-NOV-2004 (first entry)
XX
DE Anti-IFN-gamma antibody 1121 or 1121* heavy chain SEQ ID NO:21.
XX
KW antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS Homo sapiens.
XX
PN WO2004034988-A2.
XX
PD 29-APR-2004.
XX
PF 14-OCT-2003; 2003WO-US032678.
XX
PR 16-OCT-2002; 2002US-0419057P.
PR 17-JUN-2003; 2003US-0479241P.
XX
PA (AMGE-) AMGEN INC.
XX
PI Welcher A, Chute H, Li L, Huang H;
XX
DR WPI; 2004-348323/32.
XX
PT New antibody that binds specifically to IFN-gamma and comprising a heavy
PT chain CDR3, useful in preparing a composition for treating IFN-gamma
PT mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or
PT atherosclerosis.
XX
PS Claim 12; SEQ ID NO 21; 115pp; English.
XX
CC The present invention describes an isolated antibody which binds
CC specifically to interferon (IFN)-gamma and comprises a heavy chain
CC complementarity determining region (CDR) 3 having a sequence comprising
CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC (ADS87943) in the same order and spacing, or an amino acid sequence of
CC SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide
CC encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC disease; and (3) a composition comprising a carrier and the antibody. The
CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC antidiabetic activities, and can be used in gene therapy. The antibody is
CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC or haemolytic anaemia. The present sequence represents an immunoglobulin
CC G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC exemplification of the present invention.
XX
SQ Sequence 447 AA;

```
  Query Match             100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447
```

```
RESULT 120
ADS87924
ID   ADS87924 standard; protein; 447 AA.
XX
AC   ADS87924;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Anti-IFN-gamma antibody 1119 heavy chain SEQ ID NO:17.
XX
KW   antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW   anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW   gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW   multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW   myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW   systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW   vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW   immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2004034988-A2.
XX
PD   29-APR-2004.
XX
PF   14-OCT-2003; 2003WO-US032678.
XX
PR   16-OCT-2002; 2002US-0419057P.
PR   17-JUN-2003; 2003US-0479241P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Welcher A,  Chute H,  Li L,  Huang H;
XX
DR   WPI; 2004-348323/32.
XX
PT   New antibody that binds specifically to IFN-gamma and comprising a heavy
PT   chain CDR3, useful in preparing a composition for treating IFN-gamma
PT   mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or
PT   atherosclerosis.
XX
PS   Claim 12; SEQ ID NO 17; 115pp; English.
XX
CC   The present invention describes an isolated antibody which binds
CC   specifically to interferon (IFN)-gamma and comprises a heavy chain
CC   complementarity determining region (CDR) 3 having a sequence comprising
CC   at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC   (ADS87943) in the same order and spacing, or an amino acid sequence of
CC   SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide
CC   encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC   disease; and (3) a composition comprising a carrier and the antibody. The
CC   IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC   HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC   antidiabetic activities, and can be used in gene therapy. The antibody is
CC   useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC   arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC   disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC   nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC   Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC   or haemolytic anaemia. The present sequence represents an immunoglobulin
CC   G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 447 AA;
```

```
  Query Match             100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447
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```
RESULT 121
ADS87926
ID   ADS87926 standard; protein; 447 AA.
XX
AC   ADS87926;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Anti-IFN-gamma antibody 1118 heavy chain SEQ ID NO:19.
XX
KW   antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW   anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW   gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW   multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW   myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW   systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW   vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW   immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2004034988-A2.
XX
PD   29-APR-2004.
XX
PF   14-OCT-2003; 2003WO-US032678.
XX
PR   16-OCT-2002; 2002US-0419057P.
PR   17-JUN-2003; 2003US-0479241P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Welcher A,  Chute H,  Li L,  Huang H;
XX
DR   WPI; 2004-348323/32.
XX
```

```
PT   New antibody that binds specifically to IFN-gamma and comprising a heavy
PT   chain CDR3, useful in preparing a composition for treating IFN-gamma
PT   mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or
PT   atherosclerosis.
XX
PS   Claim 12; SEQ ID NO 19; 115pp; English.
XX
CC   The present invention describes an isolated antibody which binds
CC   specifically to interferon (IFN)-gamma and comprises a heavy chain
CC   complementarity determining region (CDR) 3 having a sequence comprising
CC   at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC   (ADS87943) in the same order and spacing, or an amino acid sequence of
CC   SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide
CC   encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC   disease; and (3) a composition comprising a carrier and the antibody. The
CC   IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC   HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC   antidiabetic activities, and can be used in gene therapy. The antibody is
CC   useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC   arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC   disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC   nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC   Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC   or haemolytic anaemia. The present sequence represents an immunoglobulin
CC   G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 447 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 122
ADS87939
ID   ADS87939 standard; protein; 447 AA.
XX
AC   ADS87939;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Anti-IFN-gamma antibody 1118* heavy chain SEQ ID NO:32.
XX
KW   antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW   anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW   gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW   multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW   myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW   systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW   vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW   immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2004034988-A2.
XX
PD   29-APR-2004.
XX
PF   14-OCT-2003; 2003WO-US032678.
XX
PR   16-OCT-2002; 2002US-0419057P.
PR   17-JUN-2003; 2003US-0479241P.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Welcher A,  Chute H,  Li L,  Huang H;
XX
DR   WPI; 2004-348323/32.
XX
PT   New antibody that binds specifically to IFN-gamma and comprising a heavy
PT   chain CDR3, useful in preparing a composition for treating IFN-gamma
PT   mediated diseases e.g., AIDS, psoriasis, myasthenia gravis, cirrhosis or
PT   atherosclerosis.
XX
PS   Claim 12; SEQ ID NO 32; 115pp; English.
XX
CC   The present invention describes an isolated antibody which binds
CC   specifically to interferon (IFN)-gamma and comprises a heavy chain
CC   complementarity determining region (CDR) 3 having a sequence comprising
CC   at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC   (ADS87943) in the same order and spacing, or an amino acid sequence of
CC   SEQ ID NO:37 (ADS87944). Also described: (1) an isolated polynucleotide
CC   encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC   disease; and (3) a composition comprising a carrier and the antibody. The
CC   IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC   HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC   antidiabetic activities, and can be used in gene therapy. The antibody is
CC   useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC   arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC   disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC   nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC   Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC   or haemolytic anaemia. The present sequence represents an immunoglobulin
CC   G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 447 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 123
ADS94936
ID   ADS94936 standard; protein; 447 AA.
XX
AC   ADS94936;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Anti-IFN-gamma antibody 1118* heavy chain SEQ ID NO:32.
```

```
XX
KW   antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW   anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW   gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW   multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW   myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW   systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW   vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW   immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2004035747-A2.
XX
PD   29-APR-2004.
XX
PF   16-OCT-2003; 2003WO-US032871.
XX
PR   16-OCT-2002; 2002US-0419057P.
PR   17-JUN-2003; 2003US-0479241P.
XX
PA   (AMGE-) AMGEN INC.
PA   (MEDA-) MEDAREX INC.
XX
PI   Welcher AA,  Chute HT,  Li Y,  Huang H;
XX
DR   WPI; 2004-348443/32.
XX
PT   New human anti-interferon-gamma neutralizing antibodies for treating
PT   interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,
PT   diabetes, Grave's disease, psoriasis, atherosclerosis or transplant
PT   rejection.
XX
PS   Claim 14; SEQ ID NO 32; 115pp; English.
XX
CC   The present invention describes an isolated antibody which binds
CC   specifically to interferon (IFN)-gamma and comprises a heavy chain
CC   complementarity determining region (CDR) 3 having a sequence comprising
CC   at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC   (ADS94940) in the same order and spacing, or an amino acid sequence of
CC   SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide
CC   encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC   disease; and (3) a composition comprising a carrier and the antibody. The
CC   IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC   HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC   antidiabetic activities, and can be used in gene therapy. The antibody is
CC   useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC   arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC   disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC   nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC   Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC   or haemolytic anaemia. The present sequence represents an immunoglobulin
CC   G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 447 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 124
ADS94923
ID   ADS94923 standard; protein; 447 AA.
XX
AC   ADS94923;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Anti-IFN-gamma antibody 1118 heavy chain SEQ ID NO:19.
XX
KW   antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW   anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW   gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW   multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW   myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW   systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW   vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW   immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2004035747-A2.
XX
PD   29-APR-2004.
XX
PF   16-OCT-2003; 2003WO-US032871.
XX
PR   16-OCT-2002; 2002US-0419057P.
PR   17-JUN-2003; 2003US-0479241P.
XX
PA   (AMGE-) AMGEN INC.
PA   (MEDA-) MEDAREX INC.
XX
PI   Welcher AA,  Chute HT,  Li Y,  Huang H;
XX
DR   WPI; 2004-348443/32.
XX
PT   New human anti-interferon-gamma neutralizing antibodies for treating
PT   interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,
PT   diabetes, Grave's disease, psoriasis, atherosclerosis or transplant
PT   rejection.
XX
PS   Claim 14; SEQ ID NO 19; 115pp; English.
XX
CC   The present invention describes an isolated antibody which binds
CC   specifically to interferon (IFN)-gamma and comprises a heavy chain
CC   complementarity determining region (CDR) 3 having a sequence comprising
CC   at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC   (ADS94940) in the same order and spacing, or an amino acid sequence of
CC   SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide
CC   encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC   disease; and (3) a composition comprising a carrier and the antibody. The
CC   IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC   HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC   antidiabetic activities, and can be used in gene therapy. The antibody is
CC   useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC   arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC   disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC   nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC   Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC   or haemolytic anaemia. The present sequence represents an immunoglobulin
CC   G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 447 AA;
```

```
  Query Match             100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 125
ADS94921
ID   ADS94921 standard; protein; 447 AA.
XX
AC   ADS94921;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Anti-IFN-gamma antibody 1119 heavy chain SEQ ID NO:17.
XX
KW   antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW   anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW   gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW   multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW   myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW   systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW   vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW   immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2004035747-A2.
XX
PD   29-APR-2004.
XX
PF   16-OCT-2003; 2003WO-US032871.
XX
PR   16-OCT-2002; 2002US-0419057P.
PR   17-JUN-2003; 2003US-0479241P.
XX
PA   (AMGE-) AMGEN INC.
PA   (MEDA-) MEDAREX INC.
XX
PI   Welcher AA,  Chute HT,  Li Y,  Huang H;
XX
DR   WPI; 2004-348443/32.
XX
PT   New human anti-interferon-gamma neutralizing antibodies for treating
PT   interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,
PT   diabetes, Grave's disease, psoriasis, atherosclerosis or transplant
PT   rejection.
XX
PS   Claim 14; SEQ ID NO 17; 115pp; English.
XX
CC   The present invention describes an isolated antibody which binds
CC   specifically to interferon (IFN)-gamma and comprises a heavy chain
CC   complementarity determining region (CDR) 3 having a sequence comprising
CC   at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC   (ADS94940) in the same order and spacing, or an amino acid sequence of
CC   SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide
CC   encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC   disease; and (3) a composition comprising a carrier and the antibody. The
CC   IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC   HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC   antidiabetic activities, and can be used in gene therapy. The antibody is
CC   useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC   arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC   disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC   nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC   Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC   or haemolytic anaemia. The present sequence represents an immunoglobulin
CC   G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 447 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 126
ADS94925
ID   ADS94925 standard; protein; 447 AA.
XX
AC   ADS94925;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Anti-IFN-gamma antibody 1121 or 1121* heavy chain SEQ ID NO:21.
XX
KW   antibody; interferon gamma; IFN-gamma; IFN-gamma mediated disease;
KW   anti-inflammatory; antiarthritic; anti-HIV; antianaemic;
KW   antiarteriosclerotic; hepatotropic; antipsoriatic; antidiabetic;
KW   gene therapy; AIDS; rheumatoid arthritis; inflammatory bowel disease;
KW   multiple sclerosis; Addison's disease; type I diabetes; psoriasis;
KW   myasthenia gravis; cirrhosis; lupus nephritis; atherosclerosis;
KW   systemic lupus erythematosus; sarcoidosis; Sjogren's syndrome;
KW   vasculitis; Grave's disease; Guillain-Barre syndrome; haemolytic anaemia;
KW   immunoglobulin G1; IgG1; anti-IFN-gamma antibody; human.
XX
OS   Homo sapiens.
XX
PN   WO2004035747-A2.
XX
PD   29-APR-2004.
XX
PF   16-OCT-2003; 2003WO-US032871.
XX
PR   16-OCT-2002; 2002US-0419057P.
PR   17-JUN-2003; 2003US-0479241P.
XX
PA   (AMGE-) AMGEN INC.
PA   (MEDA-) MEDAREX INC.
XX
PI   Welcher AA,  Chute HT,  Li Y,  Huang H;
XX
DR   WPI; 2004-348443/32.
```

XX
PT New human anti-interferon-gamma neutralizing antibodies for treating
PT interferon-gamma-mediated diseases, such as AIDS, rheumatoid arthritis,
PT diabetes, Grave's disease, psoriasis, atherosclerosis or transplant
PT rejection.
XX
PS Claim 14; SEQ ID NO 21; 115pp; English.
XX
CC The present invention describes an isolated antibody which binds
CC specifically to interferon (IFN)-gamma and comprises a heavy chain
CC complementarity determining region (CDR) 3 having a sequence comprising
CC at least 7 amino acids of the 8-amino acid sequence of SEQ ID NO:36
CC (ADS94940) in the same order and spacing, or an amino acid sequence of
CC SEQ ID NO:37 (ADS94941). Also described: (1) an isolated polynucleotide
CC encoding the antibody; (2) a method of treating an IFN-gamma mediated
CC disease; and (3) a composition comprising a carrier and the antibody. The
CC IFN-gamma binding antibody has anti-inflammatory, antiarthritic, anti-
CC HIV, antianaemic, antiarteriosclerotic, hepatotropic, antipsoriatic and
CC antidiabetic activities, and can be used in gene therapy. The antibody is
CC useful in treating IFN-gamma mediated disease, e.g., AIDS, rheumatoid
CC arthritis, inflammatory bowel disease, multiple sclerosis, Addison's
CC disease, type I diabetes, psoriasis, myasthenia gravis, cirrhosis, lupus
CC nephritis, atherosclerosis, systemic lupus erythematosus, sarcoidosis,
CC Sjogren's syndrome, vasculitis, Grave's disease, Guillain-Barre syndrome
CC or haemolytic anaemia. The present sequence represents an immunoglobulin
CC G1 (IgG1) anti-IFN-gamma heavy chain, which is used in the
CC exemplification of the present invention.
XX
SQ Sequence 447 AA;

Query Match 100.0%; Score 1263; DB 8; Length 447;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447
```

RESULT 127
AAB28694
ID AAB28694 standard; protein; 448 AA.
XX
AC AAB28694;
XX
DT 14-FEB-2001 (first entry)
XX
DE Fc-muAGP-1 (99-291) fusion protein.
XX
KW Mouse; AGP-1; type II transmembrane protein; cytostatic; antiviral;
KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;
KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;
KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;
KW transplant rejection; cardiovascular disease; arteriosclerosis;
KW Fc-muAGP-1; fusion protein.
XX
OS Mus sp.
XX
PN WO200063253-A1.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008004.
XX
PR 16-APR-1999; 99US-00293245.
XX
PA (AMGE-) AMGEN INC.
XX
PI Hsu H, Meng S;
XX
DR WPI; 2000-665240/64.
DR N-PSDB; AAC67834.
XX
PT Fusion protein of AGP-1 protein and an Fc region, used to treat
PT proliferative disorders, immune disorders, and virally-induced disorders.
XX
PS Disclosure; Fig 5; 93pp; English.
XX
CC The present sequence is an AGP-1 fusion protein. AGP-1 is a type II
CC transmembrane protein. The fusion proteins comprise an Fc immunoglobulin
CC region fused to the N-terminal portion of the AGP-1 protein. The fusion
CC proteins can be used to induce apoptosis in a tissue, and to treat
CC proliferative disorders, immune disorders, or virally-induced disorders.
CC The proliferative disorders include cancers, such as breast, prostate,
CC lung or colon cancer. The viral infections include hepatitis, and
CC acquired immunodeficiency syndrome (AIDS), and the immune disorders may
CC be autoimmune disorders or transplant rejection. Cardiovascular diseases
CC such as arteriosclerosis may also be treated. The AGP-1 containing fusion
CC proteins have increased biological activity compared to the soluble AGP-1
CC proteins used in prior art therapies
XX
SQ Sequence 448 AA;

Query Match 100.0%; Score 1263; DB 3; Length 448;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         24 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 255
```

RESULT 128
AAM49203
ID AAM49203 standard; protein; 448 AA.
XX
AC AAM49203;
XX
DT 29-AUG-2003 (revised)
DT 28-JUN-2002 (first entry)
XX
DE Humanised monoclonal antibody 5c8 (hu5c8) heavy chain.
XX
KW Monoclonal antibody; mAb; humanised; murine; mouse; 5c8; hu5c8;
KW heavy chain; anti-CD145; CD145-antibody complex; 3D structure;
KW three dimensional structure; drug design; drug discovery;
KW activated T cell; CD40 interaction; T cell dependent immune response;
KW agonist; antagonist; immune response; inflammatory response;
KW autoimmune disease; allergy; inhibitor response; organ graft rejection;
KW B cell cancer; Alzheimer's disease; multiple sclerosis; antiinflammatory;
KW immunosuppressive; antiallergic; cytostatic; dermatological;
KW antiasthmatic; nootropic; neuroprotective; antiarteriosclerotic;

```
KW   antiviral; antidiabetic; cardiant; antiischaemic; vasodilator;
KW   antirheumatic; antiarthritic; antipsoriatic; immunomodulator; antibody;
KW   complementarity determining region; CDR; protein co-ordinate data.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
FH   Key             Location/Qualifiers
FT   Region          1. .219
FT                   /note= "Forms part of the crystal of the invention"
FT   Region          31. .35
FT                   /label= CDR1
FT                   /note= "Complementarity determining region 1"
FT   Binding-site    31. .33
FT                   /note= "Binds to CD145 (AAM49202)"
FT   Region          50. .66
FT                   /label= CDR2
FT                   /note= "Complementarity determining region 2"
FT   Binding-site    52
FT                   /note= "Binds to CD145 (AAM49202)"
FT   Binding-site    54
FT                   /note= "Binds to CD145 (AAM49202)"
FT   Binding-site    57
FT                   /note= "Binds to CD145 (AAM49202)"
FT   Binding-site    59
FT                   /note= "Binds to CD145 (AAM49202)"
FT   Region          99. .106
FT                   /label= CDR3
FT                   /note= "Complementarity determining region 3"
FT   Binding-site    102. .103
FT                   /note= "Binds to CD145 (AAM49202)"
XX
PN   WO200218445-A2.
XX
PD   07-MAR-2002.
XX
PF   31-AUG-2001; 2001WO-US027352.
XX
PR   01-SEP-2000; 2000US-0229933P.
PR   16-MAR-2001; 2001US-0276452P.
XX
PA   (BIOJ ) BIOGEN INC.
XX
PI   Karpusas M,  Hsu Y,  Taylor FR,  Zheng Z;
XX
DR   WPI; 2002-329760/36.
XX
PT   Crystal comprising a CD154 polypeptide complexed with an anti-CD154
PT   antibody, or its antigen binding fragment, useful for designing drugs for
PT   the treatment of an autoimmune disease, an allergy, multiple sclerosis
PT   and Alzheimer's disease.
XX
PS   Example 1; Fig 8; 470pp; English.
XX
CC   The invention relates to a crystal comprising a CD145 polypeptide in
CC   complex with an anti-CD45 antibody or its antigen-binding fragment, and
CC   the structure coordinates of such a crystal. In particular, the crystal
CC   comprises human CD145 (AAM49202) and a humanised version of the murine
CC   monoclonal antibody 5c8 (hu5c8; AAM49203, AAM49204). CD145, also known as
CC   CD40L, gp39, T-BAM, 5c8 antigen, CD40CR and TRAP) is a 32 kD type II
CC   membrane glycoprotein which is transiently expressed on activated T
CC   cells. It interacts with CD40 which is expressed on mature B cells,
CC   macrophages, dendritic cells, fibroblasts and activated endothelial
CC   cells. This CD40:CD145 interaction is required for T cell-dependent
CC   antibody responses, type I T-helper cell responses, and nitric oxide (NO)
CC   production by macrophages. NO mediates many of the pro-inflammatory
CC   activities of macrophages, and disruption of the CD40:CD145 interaction
CC   via the use of an anti-CD145 antibody has been shown to reduce the
CC   symptoms of autoimmune and inflammatory conditions. The crystal structure
CC   of the invention can be used to determine the three dimensional structure
CC   of the CD145:anti-CD145 antibody complex, and thereby provide information
CC   about this interaction which may be of use in designing non-antibody
CC   CD145 agonists and antagonists which modulate the CD40:CD145 interaction.
CC   Such compounds may be used in the treatment of an unwanted immune
CC   response, an unwanted inflammatory response, an autoimmune disease, an
CC   allergy, an inhibitor response to a therapeutic agent, rejection of a
CC   donor organ, or a B cell cancer. They may be specifically be used to
CC   treat systemic lupus erythematosus, lupus nephritis, lupus neuritis,
CC   asthma, chronic obstructive pulmonary disease (COPD), bronchitis,
CC   emphysema, multiple sclerosis, uveitis, Alzheimer's disease, traumatic
CC   spinal cord injury, stroke, atherosclerosis, coronary restenosis,
CC   ischaemic congestive heart failure, cirrhosis, hepatitis C, diabetic
CC   nephropathy, glomerulonephritis, osteoarthritis, rheumatoid arthritis,
CC   psoriasis, atopic dermatitis, systemic sclerosis, radiation-induced
CC   fibrosis, Crohn's disease, ulcerative colitis, multiple myeloma and
CC   cachexia. Sequences AAM49203 and AAM49204 represent, respectively, the
CC   heavy and light chains of the humanised version of the murine monoclonal
CC   antibody 5c8 (hu5c8). (Updated on 29-AUG-2003 to standardise OS field)
XX
SQ   Sequence 448 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 448;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        217 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 276

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        277 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 336

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 396

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        397 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 448


RESULT 129
ADF71908
ID   ADF71908 standard; protein; 448 AA.
XX
AC   ADF71908;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Hu3G8VH-1G1 amino acid sequence SEQ ID NO:107.
XX
KW   anti-CD16A antibody; mouse; 3G8 antibody; humanised anti-CD16A antibody;
KW   immune response; haemostatic; antirheumatic; antiarthritic;
KW   dermatological; immunosuppressive; antiinflammatory; antianaemic;
KW   vasotropic; nephrotropic; neuroprotective; antipsoriatic; uropathic;
KW   ophthalmological; antiasthmatic; inflammatory response;
KW   autoimmune disease; idiopathic thrombocytopenic purpura;
KW   rheumatoid arthritis; systemic lupus erythematosus;
KW   autoimmune haemolytic anaemia; scleroderma;
KW   autoantibody trigged urticaria; pemphigus; vasculitis syndrome;
KW   systemic vasculitis; Goodpasture's syndrome; multiple sclerosis;
KW   psoriatic arthritis; ankylosing spondylitis; Sjogren's syndrome;
KW   Reiter's syndrome; Kowasaki's disease; polymyositis; dermatomyositis;
KW   allergic asthma.
XX
OS   Synthetic.
OS   Mus sp.
OS   Homo sapiens.
XX
PN   WO2003101485-A1.
XX
PD   11-DEC-2003.
XX
PF   29-MAY-2003; 2003WO-US017111.
```

XX
PR 30-MAY-2002; 2002US-0384689P.
PR 10-JAN-2003; 2003US-0439320P.
XX
PA (MACR-) MACROGENICS INC.
XX
PI Johnson LS, Huang L, Li H, Tuaillon N;
XX
DR WPI; 2004-042985/04.
XX
PT Novel anti-CD16A antibody comprising complementarity determining regions
PT derived from mouse 3G8 antibody and humanized anti-CD16A antibody that
PT lacks effector function, useful for treating deleterious immune response.
XX
PS Disclosure; SEQ ID NO 107; 103pp; English.
XX
CC The present invention describes an anti-CD16A antibody (I) comprising a
CC VH domain comprising complementarity determining regions (CDRs) derived
CC from the mouse 3G8 antibody heavy chain and a VL domain comprising CDRs
CC derived from the mouse 3G8 antibody light chain or a humanised anti-CD16A
CC antibody (II) that lacks effector function and comprises all six CDRs of
CC mouse antibody 3G8. Also described is a method (M1) for reducing a
CC deleterious immune response in a mammal in need of such reduction, which
CC involves administering to the mammal a CD16A binding protein comprising
CC an Fc region derived from a human IgG heavy chain, where the Fc region
CC lacks effector function or is modified to reduce binding to an Fc
CC effector ligand. (I) and (II) have haemostatic, antirheumatic,
CC antiarthritic, dermatological, immunosuppressive, antiinflammatory,
CC antianaemic, vasotropic, nephrotropic, neuroprotective, antipsoriatic,
CC uropathic, ophthalmological and antiasthmatic activities. (I) or (II) is
CC useful for reducing a deleterious immune response in a mammal which
CC involves administering to the mammal (I) or (II). The deleterious immune
CC response is an inflammatory response caused by autoimmune disease such as
CC idiopathic thrombocytopenic purpura (ITP), rheumatoid arthritis (RA),
CC systemic lupus erythematosus (SLE), autoimmune haemolytic anaemia (AHA),
CC scleroderma, autoantibody trigged urticaria, pemphigus, vasculitis
CC syndrome, systemic vasculitis, Goodpasture's syndrome, multiple sclerosis
CC (MS), psoriatic arthritis, ankylosing spondylitis, Sjogren's syndrome,
CC Reiter's syndrome, Kowasaki's disease, polymyositis and dermatomyositis
CC and also for treating diseases susceptible to treatment with intravenous
CC immunoglobulin (IVIG) therapy e.g., allergic asthma. The present sequence
CC is used in the exemplification of the present invention.
XX
SQ Sequence 448 AA;

Query Match 100.0%; Score 1263; DB 8; Length 448;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 217 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 276

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 277 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 336

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 396

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 397 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 448

RESULT 130
ADP84969
ID ADP84969 standard; protein; 448 AA.
XX
AC ADP84969;
XX
DT 09-SEP-2004 (first entry)
XX
DE Chimeric antibody cIgG-Karo4.
XX
KW antibody; Core-1 antigen; framework region; immunoglobulin superfamily;
KW protease inhibitor; lectin; helix-bundle protein; lipocalin;
KW variable heavy chain; VH; variable light chain; VL; vaccine; diagnosis;
KW alleviation; treatment; tumour; breast; colon; stomach; pancreas;
KW large/small intestine; ovary; cervix; lung; prostate; kidney; liver;
KW metastasis.
XX
OS Mus musculus.
XX
PN WO2004050707-A2.
XX
PD 17-JUN-2004.
XX
PF 01-DEC-2003; 2003WO-DE003994.
XX
PR 29-NOV-2002; 2002DE-01056900.
XX
PA (NEMO-) NEMOD BIOTHERAPEUTICS GMBH & CO KG.
XX
PI Goletz S, Danielczyk A, Karsten U, Ravn P, Stahn R;
PI Christensen PA;
XX
DR WPI; 2004-461095/43.
XX
PT New recognition molecules, e.g. antibodies (and nucleic acids) that bind
PT specifically to Core-1 antigens, useful for diagnosis, treatment and
PT prevention of tumors and metastases.
XX
PS Claim 26; SEQ ID NO 111; 136pp; German.
XX
CC This invention describes novel recognition molecules, especially
CC antibodies that bind specifically to the Core-1 antigen. The recognition
CC molecules are used to make constructs containing the framework regions
CC that separate, include and/or flank the specified sequences, especially
CC where the framework regions are from the immunoglobulin (Ig) superfamily,
CC protease inhibitors, lectins, helix-bundle proteins and/or lipocalins.
CC Most especially the framework regions are from antibodies, particularly
CC the variable heavy chain (VH) and the variable light chain (VL) of human
CC and/or murine origin. The constructs may also include a His or myc tag, a
CC lysine-rich region and/or a multimerisation domain, most particularly it
CC is a single-chain antibody fragment, multibody, Fab fragment, fusion
CC protein of an antibody fragment with peptide or protein, and/or an Ig of
CC types G, M, A, E or D and/or their subclasses. It may be human,
CC humanised, murine or chimeric, e.g. IgM without the J chain. The
CC additional sequences/structures in the constructs are Ig domains of
CC various species, interacting or stabilising domains, signal sequences,
CC fluorescent dyes, toxins, antibodies with catalytic activity or other
CC specificities, cytolytic agents, enzymes, immuno-modulators or -
CC effectors, MHC molecules, antigens, chelators for radioactive labels,
CC liposomes, transmembrane domains, viruses and/or cells, specifically
CC macrophages. The antibodies, also constructs containing them, nucleic
CC acid encoding them, and related vectors and host cells, are useful for
CC prevention (e.g. as vaccine), diagnosis, alleviation, treatment,
CC monitoring and/or secondary treatment of tumours (specifically of breast,
CC colon, stomach, pancreas, large/small intestine, ovary, cervix, lung,
CC prostate, kidney and/or liver) and/or metastases (particularly to liver),
CC specifically where these are positive for the C1 antigen. The products of
CC the invention provide simple, reliable and efficient detection of
CC tumours. They are specific for carcinoma and show almost no binding to
CC healthy tissue.
XX
SQ Sequence 448 AA;

Query Match 100.0%; Score 1263; DB 8; Length 448;
Best Local Similarity 100.0%; Pred. No. 3.3e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 217 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 276

```
Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         277 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 336

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 396

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         397 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 448


RESULT 131
AAR43339
ID   AAR43339 standard; protein; 449 AA.
XX
AC   AAR43339;
XX
DT   25-MAR-2003  (revised)
DT   29-NOV-1993  (first entry)
XX
DE   Completely humanised C4G1 Ig heavy chain.
XX
KW   Immunoglobulin; H-chain; platelet membrane glycoprotein; GPIIa/IIIb;
KW   monoclonal antibody; platelet agglutination; humanised antibody.
XX
OS   Synthetic.
XX
PN   WO9313133-A1.
XX
PD   08-JUL-1993.
XX
PF   15-DEC-1992;   92WO-JP001630.
XX
PR   20-DEC-1991;   91US-00812111.
PR   09-JUN-1992;   92US-00895952.
PR   11-SEP-1992;   92US-00944159.
XX
PA   (YAMA ) YAMANOUCHI PHARM CO LTD.
PA   (PROT-) PROTEIN DESIGN LABS INC.
XX
PI   Co MS,  Tso JY;
XX
DR   WPI; 1993-227275/28.
XX
PT   Compsn. contg. immunoglobulin specific for the GP-IIB and -IIIA protein -
PT   for treating disorders related to vascular thrombosis.
XX
PS   Claim 26; Fig 5C; 54pp; Japanese.
XX
CC   This is the sequence of the humanised C4G1 immunoglobulin heavy chain
CC   fragment. See AAR43338 for the light chain sequence. The antibody is
CC   specific for the platelet membrane glycoprotein GPIIa/IIIb and inhibits
CC   platelet agglutination. The Ig is thus useful in the treatment of
CC   thrombosis. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 449 AA;

  Query Match            100.0%;  Score 1263;  DB 2;  Length 449;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         218 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         278 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 397

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         398 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 449


RESULT 132
AAW49816
ID   AAW49816 standard; protein; 449 AA.
XX
AC   AAW49816;
XX
DT   17-OCT-2003  (revised)
DT   25-MAR-2003  (revised)
DT   24-SEP-1998  (first entry)
XX
DE   Amino acid sequence of the humanised antibody C4G1 heavy chain.
XX
KW   Humanised antibody C4G1; heavy chain; humanised; immunoglobulin; Ig;
KW   mouse C4G1; antibody; inhibition; antigen; cardiovascular disease;
KW   thromboembolic disorder; cancer; acute myocardial infarction;
KW   unstable angina; stroke; transient ischemic episode; pulmonary embolism;
KW   deep vein thrombosis; extracorporeal cardiopulmonary circulation.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
PN   US5777085-A.
XX
PD   07-JUL-1998.
XX
PF   17-MAY-1995;   95US-00458516.
XX
PR   20-DEC-1991;   91US-00812111.
PR   09-JUN-1992;   92US-00895952.
PR   11-SEP-1992;   92US-00944159.
PR   03-MAY-1993;   93US-00059159.
XX
PA   (PROT-) PROTEIN DESIGN LABS INC.
PA   (YAMA ) YAMANOUCHI PHARM CO LTD.
XX
PI   Tso JY,  Co MS;
XX
DR   WPI; 1998-398136/34.
XX
PT   New humanised immunoglobulin which binds GPIIb/IIIa - derived from mouse
PT   C4G1 antibody, used for inhibiting platelet aggregation for treating
PT   cardiovascular and thromboembolic disorders.
XX
PS   Claim 4; Fig 5D; 35pp; English.
XX
CC   This is the amino acid sequence of the humanised antibody C4G1 heavy
CC   chain, used in the method of the invention involving the creation of a
CC   humanised immunoglobulin (Ig) derived from the mouse C4G1 antibody. The
CC   humanised Ig is capable of binding to GPIIb/IIIa and inhibiting platelet
CC   aggregation and also the releasing reaction of platelets. The Ig can be
CC   used for treating cardiovascular diseases and thromboembolic disorders,
CC   e.g. acute myocardial infarction, unstable angina, stroke, transient
CC   ischemic episodes, deep vein thrombosis and pulmonary embolism,
CC   extracorporeal cardiopulmonary circulation. The Ig can also be used in
CC   diagnosing the presence and location of a thrombus, or certain types of
CC   cancer cells which develop GPIIb/IIIa on their surfaces, for the
CC   detection of GPIIb/IIIa antigens or for isolating platelets. (Updated on
CC   25-MAR-2003 to correct PA field.) (Updated on 17-OCT-2003 to standardise
CC   OS field)
XX
SQ   Sequence 449 AA;

  Query Match            100.0%;  Score 1263;  DB 2;  Length 449;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
```

```
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 397

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        398 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 449


RESULT 133
ABP58273
ID   ABP58273 standard; protein; 449 AA.
XX
AC   ABP58273;
XX
DT   23-OCT-2003  (revised)
DT   31-MAR-2003  (first entry)
XX
DE   Humanised 3D6 antibody heavy chain.
XX
KW   Monoclonal antibody; 3D6; complementarity determining region; CDR; mouse;
KW   human; humanised antibody; antibody; Alzheimer's disease;
KW   Down's syndrome; cerebral amyloid angiopathy; neuroprotective; nootropic.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
FH   Key             Location/Qualifiers
FT   Region          1. .119
FT                   /note= "heavy chain variable region"
FT   Region          31. .35
FT                   /note= "CDR1"
FT   Region          50. .66
FT                   /note= "CDR2"
FT   Region          99. .108
FT                   /note= "CDR3"
XX
PN   WO200288306-A2.
XX
PD   07-NOV-2002.
XX
PF   26-APR-2002; 2002WO-US011853.
XX
PR   30-APR-2001; 2001US-0287539P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Tsurushita N,  Vasquez M;
XX
DR   WPI; 2003-183835/18.
XX
PT   New humanized forms of mouse 3D6 antibodies, useful for treating Down's
PT   syndrome, (pre-)clinical Alzheimer's disease or (pre-)clinical cerebral
PT   amyloid angiopathy, or for inhibiting formation of or reducing Abeta
PT   plaque in the brain.
XX
PS   Claim 5; Page 10-11; 54pp; English.
XX
CC   The present sequence is that of a preferred heavy chain of a humanised
CC   antibody of the present invention. In the variable region of this
CC   sequence, the complementarity determining regions (CDRs) originate from
CC   murine monoclonal antibody 3D6 and the framework region originates from
CC   human germline VH segment DP-45 and J segment JH4. Novel humanised
CC   antibodies of the invention have CDRs from 3D6 and human framework
CC   sequences. These humanised antibodies have binding affinities (affinity
CC   and epitope location) approximately the same as those of the mouse 3D6
CC   antibody. The invention includes antibodies, single chain antibodies, and
CC   their fragments, as well as nucleotide sequences, vectors, transformed
CC   host cells, and methods of using the humanised antibody to treat,
CC   prevent, alleviate, reverse or otherwise ameliorate symptoms and/or
CC   pathology associated with Down's syndrome, (pre-)clinical Alzheimer's
CC   disease or (pre-)clinical cerebral amyloid angiopathy, and to inhibit
CC   formation or reduce Abeta plaque in the brain. (Updated on 23-OCT-2003 to
CC   standardise OS field)
XX
SQ   Sequence 449 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 449;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 397

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        398 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 449


RESULT 134
ADI35159
ID   ADI35159 standard; protein; 449 AA.
XX
AC   ADI35159;
XX
DT   22-APR-2004  (first entry)
XX
DE   Humanised C242 antibody variable heavy chain sequence.
XX
KW   C242; monoclonal antibody; cytostatic; vaccine; human; C242-DM1; tumour.
XX
OS   Homo sapiens.
XX
PN   WO2004004639-A2.
XX
PD   15-JAN-2004.
XX
PF   02-JUL-2003; 2003WO-US020751.
XX
PR   02-JUL-2002; 2002US-0393189P.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Nesta DP;
XX
DR   WPI; 2004-108709/11.
XX
PT   New stable frozen or aqueous formulation for human monoclonal antibody
PT   huC242-DM1, useful as a treatment for antigen-expressing tumor types.
XX
PS   Disclosure; SEQ ID NO 1; 11pp; English.
XX
CC   The invention relates to a stable frozen formulation for monoclonal
CC   antibody C242 comprising C242 in a concentration range of about 1-30
CC   mg/mL in a buffer maintained at pH 5.8-6.5, and sucrose of about 5% w/v.
CC   The human C242-DM1 (immunoconjugate) antibody or formulations comprising
```

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CC   the antibody may be used as a treatment for antigen-expressing tumour
CC   types. The present sequence represents a humanised C242 antibody variable
CC   heavy chain sequence.
XX
SQ   Sequence 449 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 449;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 397

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        398 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 449


RESULT 135
ABG74713
ID   ABG74713 standard; protein; 450 AA.
XX
AC   ABG74713;
XX
DT   10-MAY-2003  (first entry)
XX
DE   Murine humanised Mu007 heavy chain variable region #2.
XX
KW   Murine; heavy chain; variable region; antibody; Crohn's disease;
KW   human interleukin (IL)-1beta; antirheumatic; antiarthritic; humanised;
KW   antiinflammatory; osteopathic; antiallergic; cerebroprotective;
KW   antiasthmatic; immunosuppressive; antibacterial; vaccine; Mu007;
KW   rheumatoid arthritis; osteoarthritis; cartilage destruction; allergy;
KW   septic shock; endotoxic shock; septicaemia; stroke; asthma;
KW   graft versus host disease; inflammatory bowel disease.
XX
OS   Mus musculus.
OS   Synthetic.
XX
PN   WO2003010282-A2.
XX
PD   06-FEB-2003.
XX
PF   18-JUL-2002; 2002WO-US021281.
XX
PR   26-JUL-2001; 2001US-0307973P.
PR   14-AUG-2001; 2001US-0312278P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Bright SW,  Jia AY,  Kuhstoss SA,  Manetta JV,  Tsurushita N;
PI   Vasquez MJ;
XX
DR   WPI; 2003-248068/24.
DR   N-PSDB; ABQ77446.
XX
PT   New IL-1beta antibodies, useful for treating allergy, septic or endotoxic
PT   shock, septicemia, stroke, asthma, graft versus host disease, Crohn's
PT   disease, or inflammatory bowel disease.
XX
PS   Disclosure; Page 84-86; 98pp; English.
XX
CC   This invention describes a novel antibody that specifically binds mature
CC   human interleukin (IL)-1beta, and binds the same epitope on mature human
CC   IL-1beta as mouse monoclonal antibody Mu007 or humanized antibody Hu007.
CC   The antibody of the invention have antirheumatic, antiarthritic,
CC   antiinflammatory, osteopathic, antiallergic, cerebroprotective,
CC   antiasthmatic, immunosuppressive and antibacterial activity and can be
CC   used in a vaccine. The antibody is useful for manufacturing a medicament
CC   for treating rheumatoid arthritis or osteoarthritis, or for inhibiting
CC   cartilage destruction in a subject. The antibody is also useful for
CC   treating allergy, septic or endotoxic shock, septicaemia, stroke, asthma,
CC   graft versus host disease, Crohn's disease, or inflammatory bowel
CC   disease. This sequence represents the humanised murine Mu007 heavy chain
CC   variable region described in the disclosure of the invention
XX
SQ   Sequence 450 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 450;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 278

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 398

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 450


RESULT 136
ABR83153
ID   ABR83153 standard; protein; 450 AA.
XX
AC   ABR83153;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Hu007 antibody analogue heavy chain sequence.
XX
KW   Hu007; analogue; humanized antibody; IL-1beta; interleukin-1 beta;
KW   complementarity determining region; osteopathic; antiarthritic;
KW   gene therapy; CDR.
XX
OS   Synthetic.
XX
PN   WO2003073982-A2.
XX
PD   12-SEP-2003.
XX
PF   20-FEB-2003; 2003WO-US003117.
XX
PR   28-FEB-2002; 2002US-0361423P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Beals JM,  Huang L,  Lu J,  Rogers DP,  Witcher DR;
XX
DR   WPI; 2003-731644/69.
DR   N-PSDB; ACF57838.
XX
PT   New analog of humanized antibody Hu007 that specifically binds mature IL-
PT   1 beta, useful for the manufacture of a medicament for treating
PT   rheumatoid arthritis or osteoarthritis.
XX
PS   Claim 17; Page 15-18; 120pp; English.
XX
CC   The invention relates to an analogue of humanized antibody Hu007 that
```

```
CC   specifically binds mature IL-1beta and comprises at least one amino acid
CC   substitution at positions 54, 55 or 56 of the heavy chain complementarity
CC   determining region 2 (CDR2). The analogue is useful for the manufacture
CC   of a medicament for treating rheumatoid arthritis or osteoarthritis or
CC   for inhibiting cartilage destruction. The present sequence represents an
CC   antibody Hu007 analogue heavy chain sequence
XX
SQ   Sequence 450 AA;

  Query Match            100.0%;  Score 1263;  DB 7;  Length 450;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 278

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 398

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 450


RESULT 137
ADS18704
ID   ADS18704 standard; protein; 450 AA.
XX
AC   ADS18704;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Protein sequence of human W17-IgG1 heavy chain.
XX
KW   Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;
KW   CDR3; W17-IgG1 heavy chain; interleukin -1 beta; IL-1 beta; cytokine;
KW   bone destruction; cartilage destruction; rheumatoid arthritis;
KW   osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;
KW   excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 55
FT                   /note= "This specification states that there is
FT                   elimination of deamidation at this position, however,
FT                   this residue is a Serine and not an Asparagine or
FT                   Glutamine"
XX
PN   WO2004067568-A2.
XX
PD   12-AUG-2004.
XX
PF   21-JAN-2004; 2004WO-US000019.
XX
PR   24-JAN-2003; 2003US-0442798P.
XX
PA   (MOLE-) APPLIED MOLECULAR EVOLUTION INC.
XX
PI   Dickinson CD,  Vasserot AP,  Watkins JD,  Lu J;
XX
DR   WPI; 2004-580977/56.
XX
PT   New isolated antibodies that specifically bind mature human IL-1 beta,
PT   useful for treating diseases such as rheumatoid arthritis, osteoarthritis
PT   or neuroinflammation, or for inhibiting cartilage destruction.
XX
PS   Claim 5; SEQ ID NO 47; 79pp; English.
XX
CC   The present invention encompasses humanised IL-1 beta antibodies. These
CC   antibodies are high affinity antibodies with improved stability, reduced
CC   deamidation and highly specific for IL-1 beta compared to the native
CC   antibody. They have potent IL-1 beta neutralising activity. The increased
CC   potency of an existing antibody is achieved through selective changes to
CC   one or more amino acids. The property of the antibodies of the invention
CC   resides primarily in the variable regions or complementarity determining
CC   regions (CDR) of the antibody. The proposed antibodies are comprised of
CC   light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)
CC   antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the
CC   primary mediator of bone and cartilage destruction. The over-production
CC   of the IL-1 beta has been implicated in the pathogenesis of a variety of
CC   diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-
CC   inflammation, graft versus host disease, Crohn's disease, inflammatory
CC   bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease
CC   etc.). An effective amount of the IL-1 beta antibodies of the present
CC   invention provides clinical efficacy without intolerable side effects or
CC   toxicity. The antibodies are also useful for manufacturing a medicament
CC   for the treatment of rheumatoid arthritis and osteoarthritis. It can be
CC   used to inhibit cartilage destruction and neuro-inflammation (which is
CC   associated with stroke or ischaemic, excitotoxic, or traumatic head
CC   injury). The IL-1 beta antibodies of the invention are preferably used to
CC   treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-
CC   inflammation. The IL-1 beta antibodies of the invention can be used alone
CC   or in combination DMARDS (disease modifying antirheumatic drugs) to
CC   reduce IL-1 beta protein levels in plasma. The invention provides the
CC   polynucleotide sequences which encode the antibodies against IL-1 beta.
CC   It also provides the methods for using these antibodies for the treatment
CC   of IL-1 beta related inflammatory disorders. The isolated antibodies of
CC   the invention are selected from the group IgG1 and IgG4. IgG antibodies
CC   are the most abundant immunoglobulin and has the longest half-life in
CC   serum compared to other immunoglobulin. Unlike other immunoglobulins IgG
CC   is efficiently recirculated. The presented protein sequence is the human
CC   W17-IgG1 heavy chain.
XX
SQ   Sequence 450 AA;

  Query Match            100.0%;  Score 1263;  DB 8;  Length 450;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 278

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 398

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 450


RESULT 138
ADS18706
ID   ADS18706 standard; protein; 450 AA.
XX
AC   ADS18706;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Protein sequence of human W18-heavy chain.
XX
KW   Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;
KW   CDR3; W18-heavy chain; interleukin -1 beta; IL-1 beta; cytokine;
KW   bone destruction; cartilage destruction; rheumatoid arthritis;
```

```
KW   osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;
KW   excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 55
FT                   /note= "This specification states that there is
FT                   elimination of deamidation at this position, however,
FT                   this residue is a Serine and not an Asparagine or
FT                   Glutamine"
XX
PN   WO2004067568-A2.
XX
PD   12-AUG-2004.
XX
PF   21-JAN-2004; 2004WO-US000019.
XX
PR   24-JAN-2003; 2003US-0442798P.
XX
PA   (MOLE-) APPLIED MOLECULAR EVOLUTION INC.
XX
PI   Dickinson CD,  Vasserot AP,  Watkins JD,  Lu J;
XX
DR   WPI; 2004-580977/56.
XX
PT   New isolated antibodies that specifically bind mature human IL-1 beta,
PT   useful for treating diseases such as rheumatoid arthritis, osteoarthritis
PT   or neuroinflammation, or for inhibiting cartilage destruction.
XX
PS   Claim 12; SEQ ID NO 49; 79pp; English.
XX
CC   The present invention encompasses humanised IL-1 beta antibodies. These
CC   antibodies are high affinity antibodies with improved stability, reduced
CC   deamidation and highly specific for IL-1 beta compared to the native
CC   antibody. They have potent IL-1 beta neutralising activity. The increased
CC   potency of an existing antibody is achieved through selective changes to
CC   one or more amino acids. The property of the antibodies of the invention
CC   resides primarily in the variable regions or complementarity determining
CC   regions (CDR) of the antibody. The proposed antibodies are comprised of
CC   light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)
CC   antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the
CC   primary mediator of bone and cartilage destruction. The over-production
CC   of the IL-1 beta has been implicated in the pathogenesis of a variety of
CC   diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-
CC   inflammation, graft versus host disease, Crohn's disease, inflammatory
CC   bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease
CC   etc.). An effective amount of the IL-1 beta antibodies of the present
CC   invention provides clinical efficacy without intolerable side effects or
CC   toxicity. The antibodies are also useful for manufacturing a medicament
CC   for the treatment of rheumatoid arthritis and osteoarthritis. It can be
CC   used to inhibit cartilage destruction and neuro-inflammation (which is
CC   associated with stroke or ischaemic, excitotoxic, or traumatic head
CC   injury). The IL-1 beta antibodies of the invention are preferably used to
CC   treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-
CC   inflammation. The IL-1 beta antibodies of the invention can be used alone
CC   or in combination DMARDS (disease modifying antirheumatic drugs) to
CC   reduce IL-1 beta protein levels in plasma. The invention provides the
CC   polynucleotide sequences which encode the antibodies against IL-1 beta.
CC   It also provides the methods for using these antibodies for the treatment
CC   of IL-1 beta related inflammatory disorders. The isolated antibodies of
CC   the invention are selected from the group IgG1 and IgG4. IgG antibodies
CC   are the most abundant immunoglobulin and has the longest half-life in
CC   serum compared to other immunoglobulin. Unlike other immunoglobulins IgG
CC   is efficiently recirculated. The presented protein sequence is the human
CC   W18-heavy chain.
XX
SQ   Sequence 450 AA;

  Query Match           100.0%;  Score 1263;  DB 8;  Length 450;
  Best Local Similarity  100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 278

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 398

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 450


RESULT 139
ADS18710
ID   ADS18710 standard; protein; 450 AA.
XX
AC   ADS18710;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Protein sequence of human U43-heavy chain.
XX
KW   Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;
KW   CDR3; U43-heavy chain; interleukin -1 beta; IL-1 beta; cytokine;
KW   bone destruction; cartilage destruction; rheumatoid arthritis;
KW   osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;
KW   excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 55
FT                   /note= "This specification states that there is
FT                   elimination of deamidation at this position, however,
FT                   this residue is a Serine and not an Asparagine or
FT                   Glutamine"
XX
PN   WO2004067568-A2.
XX
PD   12-AUG-2004.
XX
PF   21-JAN-2004; 2004WO-US000019.
XX
PR   24-JAN-2003; 2003US-0442798P.
XX
PA   (MOLE-) APPLIED MOLECULAR EVOLUTION INC.
XX
PI   Dickinson CD,  Vasserot AP,  Watkins JD,  Lu J;
XX
DR   WPI; 2004-580977/56.
XX
PT   New isolated antibodies that specifically bind mature human IL-1 beta,
PT   useful for treating diseases such as rheumatoid arthritis, osteoarthritis
PT   or neuroinflammation, or for inhibiting cartilage destruction.
XX
PS   Claim 18; SEQ ID NO 53; 79pp; English.
XX
CC   The present invention encompasses humanised IL-1 beta antibodies. These
CC   antibodies are high affinity antibodies with improved stability, reduced
CC   deamidation and highly specific for IL-1 beta compared to the native
CC   antibody. They have potent IL-1 beta neutralising activity. The increased
CC   potency of an existing antibody is achieved through selective changes to
CC   one or more amino acids. The property of the antibodies of the invention
CC   resides primarily in the variable regions or complementarity determining
CC   regions (CDR) of the antibody. The proposed antibodies are comprised of
CC   light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)
CC   antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the
CC   primary mediator of bone and cartilage destruction. The over-production
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CC   of the IL-1 beta has been implicated in the pathogenesis of a variety of
CC   diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-
CC   inflammation, graft versus host disease, Crohn's disease, inflammatory
CC   bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease
CC   etc.). An effective amount of the IL-1 beta antibodies of the present
CC   invention provides clinical efficacy without intolerable side effects or
CC   toxicity. The antibodies are also useful for manufacturing a medicament
CC   for the treatment of rheumatoid arthritis and osteoarthritis. It can be
CC   used to inhibit cartilage destruction and neuro-inflammation (which is
CC   associated with stroke or ischaemic, excitotoxic, or traumatic head
CC   injury). The IL-1 beta antibodies of the invention are preferably used to
CC   treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-
CC   inflammation. The IL-1 beta antibodies of the invention can be used alone
CC   or in combination DMARDS (disease modifying antirheumatic drugs) to
CC   reduce IL-1 beta protein levels in plasma. The invention provides the
CC   polynucleotide sequences which encode the antibodies against IL-1 beta.
CC   It also provides the methods for using these antibodies for the treatment
CC   of IL-1 beta related inflammatory disorders. The isolated antibodies of
CC   the invention are selected from the group IgG1 and IgG4. IgG antibodies
CC   are the most abundant immunoglobulin and has the longest half-life in
CC   serum compared to other immunoglobulin. Unlike other immunoglobulins IgG
CC   is efficiently recirculated. The presented protein sequence is the human
CC   U43-heavy chain.
XX
SQ   Sequence 450 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 450;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 278

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 398

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 450


RESULT 140
ADS18702
ID   ADS18702 standard; protein; 450 AA.
XX
AC   ADS18702;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Protein sequence of human W13-heavy chain.
XX
KW   Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;
KW   CDR3; W13 heavy chain; interleukin -1 beta; IL-1 beta; cytokine;
KW   bone destruction; cartilage destruction; rheumatoid arthritis;
KW   osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;
KW   excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 55
FT                   /note= "This specification states that there is
FT                   elimination of deamidation at this position, however,
FT                   this residue is a Serine and not an Asparagine or
FT                   Glutamine"
XX
PN   WO2004067568-A2.
XX
PD   12-AUG-2004.
XX
PF   21-JAN-2004; 2004WO-US000019.
XX
PR   24-JAN-2003; 2003US-0442798P.
XX
PA   (MOLE-) APPLIED MOLECULAR EVOLUTION INC.
XX
PI   Dickinson CD,  Vasserot AP,  Watkins JD,  Lu J;
XX
DR   WPI; 2004-580977/56.
XX
PT   New isolated antibodies that specifically bind mature human IL-1 beta,
PT   useful for treating diseases such as rheumatoid arthritis, osteoarthritis
PT   or neuroinflammation, or for inhibiting cartilage destruction.
XX
PS   Claim 9; SEQ ID NO 45; 79pp; English.
XX
CC   The present invention encompasses humanised IL-1 beta antibodies. These
CC   antibodies are high affinity antibodies with improved stability, reduced
CC   deamidation and highly specific for IL-1 beta compared to the native
CC   antibody. They have potent IL-1 beta neutralising activity. The increased
CC   potency of an existing antibody is achieved through selective changes to
CC   one or more amino acids. The property of the antibodies of the invention
CC   resides primarily in the variable regions or complementarity determining
CC   regions (CDR) of the antibody. The proposed antibodies are comprised of
CC   light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)
CC   antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the
CC   primary mediator of bone and cartilage destruction. The over-production
CC   of the IL-1 beta has been implicated in the pathogenesis of a variety of
CC   diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-
CC   inflammation, graft versus host disease, Crohn's disease, inflammatory
CC   bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease
CC   etc.). An effective amount of the IL-1 beta antibodies of the present
CC   invention provides clinical efficacy without intolerable side effects or
CC   toxicity. The antibodies are also useful for manufacturing a medicament
CC   for the treatment of rheumatoid arthritis and osteoarthritis. It can be
CC   used to inhibit cartilage destruction and neuro-inflammation (which is
CC   associated with stroke or ischaemic, excitotoxic, or traumatic head
CC   injury). The IL-1 beta antibodies of the invention are preferably used to
CC   treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-
CC   inflammation. The IL-1 beta antibodies of the invention can be used alone
CC   or in combination DMARDS (disease modifying antirheumatic drugs) to
CC   reduce IL-1 beta protein levels in plasma. The invention provides the
CC   polynucleotide sequences which encode the antibodies against IL-1 beta.
CC   It also provides the methods for using these antibodies for the treatment
CC   of IL-1 beta related inflammatory disorders. The isolated antibodies of
CC   the invention are selected from the group IgG1 and IgG4. IgG antibodies
CC   are the most abundant immunoglobulin and has the longest half-life in
CC   serum compared to other immunoglobulin. Unlike other immunoglobulins IgG
CC   is efficiently recirculated. The presented protein sequence is the human
CC   W13-heavy chain.
XX
SQ   Sequence 450 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 450;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 278

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 398

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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                     ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 450
```

RESULT 141
ADS18708
ID ADS18708 standard; protein; 450 AA.
XX
AC ADS18708;
XX
DT 18-NOV-2004 (first entry)
XX
DE Protein sequence of human W20-heavy chain.
XX
KW Antibody; humanised; complementarity determining region; CDR; CDR1; CDR2;
KW CDR3; W20-heavy chain; interleukin -1 beta; IL-1 beta; cytokine;
KW bone destruction; cartilage destruction; rheumatoid arthritis;
KW osteoarthritis; clinical efficacy; neuro-inflammation; stroke; ischaemic;
KW excitotoxic; traumatic head injury; inflammatory disorder; IgG; human.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 55
FT /note= "This specification states that there is
FT elimination of deamidation at this position, however,
FT this residue is a Serine and not an Asparagine or
FT Glutamine"
XX
PN WO2004067568-A2.
XX
PD 12-AUG-2004.
XX
PF 21-JAN-2004; 2004WO-US000019.
XX
PR 24-JAN-2003; 2003US-0442798P.
XX
PA (MOLE-) APPLIED MOLECULAR EVOLUTION INC.
XX
PI Dickinson CD, Vasserot AP, Watkins JD, Lu J;
XX
DR WPI; 2004-580977/56.
XX
PT New isolated antibodies that specifically bind mature human IL-1 beta,
PT useful for treating diseases such as rheumatoid arthritis, osteoarthritis
PT or neuroinflammation, or for inhibiting cartilage destruction.
XX
PS Claim 15; SEQ ID NO 51; 79pp; English.
XX
CC The present invention encompasses humanised IL-1 beta antibodies. These
CC antibodies are high affinity antibodies with improved stability, reduced
CC deamidation and highly specific for IL-1 beta compared to the native
CC antibody. They have potent IL-1 beta neutralising activity. The increased
CC potency of an existing antibody is achieved through selective changes to
CC one or more amino acids. The property of the antibodies of the invention
CC resides primarily in the variable regions or complementarity determining
CC regions (CDR) of the antibody. The proposed antibodies are comprised of
CC light chain (CDR1, CDR2 and CDR3) and heavy chain (CDR1, CDR2 and CDR3)
CC antibody. Interleukin -1 beta is a pro-inflammatory cytokine which is the
CC primary mediator of bone and cartilage destruction. The over-production
CC of the IL-1 beta has been implicated in the pathogenesis of a variety of
CC diseases (rheumatoid arthritis, osteoarthritis, asthma, neuro-
CC inflammation, graft versus host disease, Crohn's disease, inflammatory
CC bowel disease, multiple sclerosis, Parkinson's and Alzheimer's disease
CC etc.). An effective amount of the IL-1 beta antibodies of the present
CC invention provides clinical efficacy without intolerable side effects or
CC toxicity. The antibodies are also useful for manufacturing a medicament
CC for the treatment of rheumatoid arthritis and osteoarthritis. It can be
CC used to inhibit cartilage destruction and neuro-inflammation (which is
CC associated with stroke or ischaemic, excitotoxic, or traumatic head
CC injury). The IL-1 beta antibodies of the invention are preferably used to
CC treat rheumatoid arthritis (RA), osteoarthritis (OA) and neuro-
CC inflammation. The IL-1 beta antibodies of the invention can be used alone
CC or in combination DMARDS (disease modifying antirheumatic drugs) to
CC reduce IL-1 beta protein levels in plasma. The invention provides the
CC polynucleotide sequences which encode the antibodies against IL-1 beta.
CC It also provides the methods for using these antibodies for the treatment
CC of IL-1 beta related inflammatory disorders. The isolated antibodies of
CC the invention are selected from the group IgG1 and IgG4. IgG antibodies
CC are the most abundant immunoglobulin and has the longest half-life in
CC serum compared to other immunoglobulin. Unlike other immunoglobulins IgG
CC is efficiently recirculated. The presented protein sequence is the human
CC W20-heavy chain.
XX
SQ Sequence 450 AA;

```
  Query Match             100.0%;  Score 1263;  DB 8;  Length 450;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 278

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 398

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 450
```

RESULT 142
AAE12715
ID AAE12715 standard; protein; 451 AA.
XX
AC AAE12715;
XX
DT 04-JAN-2002 (first entry)
XX
DE Human recombinant immunoglobulin (Ig) heavy chain region.
XX
KW Human; tumour-associated antigen mucin-1; MUC-1; adenocarcinoma;
KW heavy chain region; cancer; breast; ovary; lung; bladder; cytostatic;
KW therapy; immunoglobulin; Ig.
XX
OS Homo sapiens.
XX
PN WO200175110-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US010589.
XX
PR 30-MAR-2000; 2000US-00538913.
XX
PA (DYAX-) DYAX CORP.
XX
PI Hoogenboom HRJM, Henderikx MPG;
XX
DR WPI; 2001-626437/72.
DR N-PSDB; AAD20745.
XX
PT Novel isolated tumor-associated antigen mucin-1-specific binding member
PT for diagnosing and treating cancer, comprises mucin-1 binding domain or
PT its portion for binding to an epitope of the protein core of mucin-1.
XX
PS Claim 12; Page 106-108; 126pp; English.
XX
CC The invention relates to an isolated tumour-associated antigen mucin-1
CC (MUC-1)-specific binding member comprising an antigen binding domain

CC region having an antibody variable light (VL) or heavy (VH) region, or a
CC complementarity determining region (CDR) of VL or VH. MUC1-specific
CC binding member is useful for diagnosing cancer, preferably adenocarcinoma
CC The binding of MUC1-specific binding member to MUC1 is detected by a
CC detection method selected from enzyme-linked immunosorbent assay,
CC magnetic resonance imaging, scintillation counting, and X-ray film. MUC1-
CC specific binding member is useful for treating cancer, preferably
CC adenocarcinoma, in an individual, where the cancer is present in tissue
CC of the breast, ovary, lung, or bladder of the individual. MUC1-specific
CC binding member is useful for diagnosing and imaging MUC1-expressing
CC cancer cells and tissues, for purifying or isolating non-glycosylated,
CC underglycosylated or cancer-associated forms of MUC1 or MUC1 epitope-
CC containing molecules, and for therapeutically or prophylactically
CC treating cancer. The present sequence is human recombinant immunoglobulin
CC (Ig) heavy chain region (variable VH and CH constant heavy chain)
XX
SQ Sequence 451 AA;

Query Match 100.0%; Score 1263; DB 4; Length 451;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451
```

RESULT 143
AAU81014
ID AAU81014 standard; protein; 451 AA.
XX
AC AAU81014;
XX
DT 09-APR-2002 (first entry)
XX
DE B7-related protein, BSL3-Ig fusion construct.
XX
KW Human; immunosuppressive; antirheumatic; antiarthritic; antiulcer;
KW antianaemic; antipsoriatic; B7-related polypeptide; BSL1; BSL2; BSL3;
KW autoimmune disease; rheumatoid arthritis; multiple sclerosis;
KW Hashimoto's thyroiditis; Graves' disease; Crohn's disease; psoriasis;
KW ulcerative colitis; pernicious anaemia; bone marrow transplantation;
KW graft versus host disease; organ transplantation.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200194413-A2.
XX
PD 13-DEC-2001.
XX
PF 06-JUN-2001; 2001WO-US018257.
XX
PR 06-JUN-2000; 2000US-0209811P.
PR 28-FEB-2001; 2001US-0272107P.
XX
PA (BRIM) BRISTOL-MYERS SQUIBB CO.
XX
PI Mikesell GE, Chang H, Finger JN, Yang G, Lu P, Zhou X, Peach R;
XX
DR WPI; 2002-090141/12.
DR N-PSDB; ABK24018.
XX
PT Nucleic acids encoding B7-related polypeptides, i.e. BSL1, BSL2, or BSL3
PT polypeptides, useful for treating autoimmune diseases (e.g. rheumatoid
PT arthritis, multiple sclerosis, and psoriasis), and graft versus host
PT disease.
XX
PS Example 6; Fig 6B; 179pp; English.
XX
CC The invention relates to novel nucleic acids encoding B7-related
CC polypeptides. The B7-related polypeptides include the BSL1, BSL2, or BSL3
CC polypeptides, or their soluble fragments. The nucleic acid, polypeptide,
CC and antibodies are useful for treating autoimmune diseases (e.g.
CC rheumatoid arthritis, multiple sclerosis, Hashimoto's thyroiditis,
CC Graves' disease, Crohn's disease, ulcerative colitis, pernicious anaemia
CC and psoriasis. They may also be used to treat tissue, bone marrow, and
CC organ transplantation, and graft versus host disease. AAU81007-AAU81015
CC represent B7-related proteins, BSL1, BSL2 and BSL3 amino acid sequences
CC and related sequences of the invention
XX
SQ Sequence 451 AA;

Query Match 100.0%; Score 1263; DB 5; Length 451;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451
```

RESULT 144
ABU58807
ID ABU58807 standard; protein; 451 AA.
XX
AC ABU58807;
XX
DT 15-APR-2003 (first entry)
XX
DE Mucin 1 (MUC-1) binding immunoglobulin kappa heavy chain.
XX
KW Mucin-1-specific binding member; human; cancer; adenocarcinoma;
KW breast cancer; ovarian cancer; bladder cancer; lung cancer;
KW anti-cancer regimen; anti-cancer drug; radiation treatment.
XX
OS Homo sapiens.
XX
PN US2002146750-A1.
XX
PD 10-OCT-2002.
XX
PF 30-MAR-2001; 2001US-00822698.
XX
PR 30-MAR-2000; 2000US-00538913.
XX
PA (HOOG/) HOOGENBOOM H R J M.
PA (HEND/) HENDERIKX M P G.
XX
PI Hoogenboom HRJM, Henderikx MPG;
XX
DR WPI; 2003-198057/19.

DR N-PSDB; ABX79100.
XX
PT Isolated mucin-1-specific binding member for diagnosing and/or treating
PT cancer, e.g. breast cancer, comprises antigen binding domain having
PT region that contains specific amino acid sequence.
XX
PS Claim 12; Page 41-42; 70pp; English.
XX
CC The invention describes an isolated mucin-1-specific binding member
CC having an antigen binding domain including a region that comprises a
CC specific amino acid sequence. The inventive MUC1-specific binding member
CC is used in the diagnosis and/or treatment of cancer, e.g. adenocarcinoma,
CC found in various tissues, e.g. breast, ovary, bladder, and lung. It can
CC be used alone or as a component in a more complex anti-cancer regimen
CC which may contain anti-cancer drug(s) and/or radiation treatment(s). The
CC inventive binding member recognizes tumour-associated MUC1 on
CC adenocarcinoma. Its affinity is high enough to bind to tumour cells. This
CC is the amino acid sequence of a mucin 1 (MUC-1) specific antibody region
CC used to isolate MUC-1 antigen binding domains for use in the treatment of
CC cancer
XX
SQ Sequence 451 AA;

Query Match 100.0%; Score 1263; DB 6; Length 451;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451

RESULT 145
ADL92472
ID ADL92472 standard; protein; 451 AA.
XX
AC ADL92472;
XX
DT 01-JUL-2004 (first entry)
XX
DE Antibody "Rituximab" heavy chain sequence.
XX
KW cytostatic; antiinflammatory; cardiovascular; gene therapy; antibody; Fc;
KW agriculture; industrial application.
XX
OS Homo sapiens.
XX
PN WO2004029207-A2.
XX
PD 08-APR-2004.
XX
PF 26-SEP-2003; 2003WO-US030249.
XX
PR 27-SEP-2002; 2002US-0414433P.
PR 23-JAN-2003; 2003US-0442301P.
PR 02-MAY-2003; 2003US-0467606P.
PR 12-JUN-2003; 2003US-0477839P.
XX
PA (XENC-) XENCOR.
XX
PI Lazar GA, Chirino AJ, Dang W, Desjarlais JR, Doberstein SK;
PI Hayes RJ, Karki SB, Vafa O;
XX
DR WPI; 2004-316096/29.
XX
PT New optimized Fc variant antibody useful for diagnosing or treating
PT diseases (e.g. cancer, inflammation or cardiovascular diseases), in
PT research and in agricultural or industrial applications.
XX
PS Example 12; Fig 31b; 192pp; English.
XX
CC The invention relates to an antibody comprising an Fc variant portion
CC having an amino acid modification in the Fc region of the parent Fc
CC polypeptide, where the Fc variant modulates binding to an Fc-gamma-R
CC compared to the parent Fc polypeptide. The antibody may also be used in
CC research and in agricultural or industrial applications. This sequence
CC corresponds to the heavy chain of the antibody "Rituximab" as an example
CC of an antibody of the invention.
XX
SQ Sequence 451 AA;

Query Match 100.0%; Score 1263; DB 8; Length 451;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451

RESULT 146
ADL92469
ID ADL92469 standard; protein; 451 AA.
XX
AC ADL92469;
XX
DT 01-JUL-2004 (first entry)
XX
DE Antibody ALEMTUZUMAB (RTM) heavy chain sequence.
XX
KW cytostatic; antiinflammatory; cardiovascular; gene therapy; antibody; Fc;
KW agriculture; industrial application.
XX
OS Homo sapiens.
XX
PN WO2004029207-A2.
XX
PD 08-APR-2004.
XX
PF 26-SEP-2003; 2003WO-US030249.
XX
PR 27-SEP-2002; 2002US-0414433P.
PR 23-JAN-2003; 2003US-0442301P.
PR 02-MAY-2003; 2003US-0467606P.
PR 12-JUN-2003; 2003US-0477839P.
XX
PA (XENC-) XENCOR.
XX
PI Lazar GA, Chirino AJ, Dang W, Desjarlais JR, Doberstein SK;
PI Hayes RJ, Karki SB, Vafa O;
XX
DR WPI; 2004-316096/29.

XX
PT New optimized Fc variant antibody useful for diagnosing or treating
PT diseases (e.g. cancer, inflammation or cardiovascular diseases), in
PT research and in agricultural or industrial applications.
XX
PS Disclosure; Fig 5; 192pp; English.
XX
CC The invention relates to an antibody comprising an Fc variant portion
CC having an amino acid modification in the Fc region of the parent Fc
CC polypeptide, where the Fc variant modulates binding to an Fc-gamma-R
CC compared to the parent Fc polypeptide. The antibody may also be used in
CC research and in agricultural or industrial applications. This sequence
CC corresponds to the heavy chain of the antibody "Alemtuzumab" (Campath
CC (RTM) for ILEX Pharmaceuticals LP) and is an example of an antibody of
CC the invention.
XX
SQ Sequence 451 AA;

Query Match 100.0%; Score 1263; DB 8; Length 451;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451

RESULT 147
ADP88494
ID ADP88494 standard; protein; 451 AA.
XX
AC ADP88494;
XX
DT 09-SEP-2004 (first entry)
XX
DE Humanised CD8 antibody heavy chain SEQ ID NO: 33.
XX
KW immunosuppressive; transplant rejection; antigen tolerance; antibody;
KW TRX1; CD8.
XX
OS Unidentified.
XX
PN WO2004052398-A1.
XX
PD 24-JUN-2004.
XX
PF 09-DEC-2003; 2003WO-US039165.
XX
PR 09-DEC-2002; 2002US-0431839P.
XX
PA (TOLE-) TOLERRX INC.
XX
PI Windsor-Hines D, Rao P, Ringler DJ;
XX
DR WPI; 2004-468712/44.
DR N-PSDB; ADP88456.
XX
PT Treating a primate to induce tolerance to at least one antigen comprises
PT administering at least one anti-CD4 antibody or its fragment in an
PT initial dose of at least 40 mg/kg and at least one compound that inhibits
PT CD8+ T cells.
XX
PS Example 5; SEQ ID NO 33; 113pp; English.
XX
CC The present invention relates to a process of treating a primate to
CC induce tolerance to at least one antigen, which comprises administering
CC to the primate at least one anti-CD4 antibody or its fragment in an
CC initial dose of at least 40 mg/kg and at least one compound that inhibits
CC CD8+ T cells, where the anti-CD4 antibody or its fragment is present in
CC the primate when the antigen is present in the primate. The method is
CC useful in treating a primate to induce tolerance to at least one foreign
CC antigen to prevent transplant rejection. The present sequence is an
CC antibody fragment used in the exemplification of the invention.
XX
SQ Sequence 451 AA;

Query Match 100.0%; Score 1263; DB 8; Length 451;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451

RESULT 148
AAY30201
ID AAY30201 standard; protein; 452 AA.
XX
AC AAY30201;
XX
DT 17-OCT-2003 (revised)
DT 01-NOV-1999 (first entry)
XX
DE Heavy chain sequence of chimeric anti-CD40 antibody chi220.
XX
KW Heavy chain variable region; chimeric antibody; anti-CD40 antibody;
KW chi220; humoral immune response; T cell dependent antigen;
KW collagen induced arthritis; transplant induced rejection;
KW T cell mediated disorder; autoimmune disease; inflammatory disease;
KW transplantation.
XX
OS Mus sp.
OS Homo sapiens.
OS Chimeric.
XX
PN WO9942075-A2.
XX
PD 26-AUG-1999.
XX
PF 10-FEB-1999; 99WO-US002949.
XX
PR 19-FEB-1998; 98US-00026291.
XX
PA (BRIM) BRISTOL-MYERS SQUIBB CO.
XX
PI Aruffo AA, Hollenbaugh D, Siadak AW, Berry KK, Harris LJ;
PI Thorne BA, Bajorath J, Wu H, Huse WD, Watkins JD;
XX
DR WPI; 1999-527408/44.
XX
PT Antibody that binds human CD40, for treating T cell mediated disorders.

```
XX
PS   Claim 6; Page 20; 77pp; English.
XX
CC   The present sequence represents the heavy chain of a chimeric anti-CD40
CC   antibody designated chi220. The antibodies are effective in modulating
CC   humoral immune response against T cell dependent antigens, collagen
CC   induced arthritis and transplant induced rejection. They are also useful
CC   for their anti-inflammatory properties. The antibodies have wide
CC   therapeutic applications, including autoimmune and inflammatory diseases
CC   and transplantation. The antibody can be used in a pharmaceutical
CC   composition for treating a patient suffering from a T cell mediated
CC   disorder. They can also be used to treat autoimmune diseases,
CC   inflammatory diseases, and transplantation. (Updated on 17-OCT-2003 to
CC   standardise OS field)
XX
SQ   Sequence 452 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 452;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 280

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 340

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 400

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 452


RESULT 149
AAY97591
ID   AAY97591 standard; protein; 452 AA.
XX
AC   AAY97591;
XX
DT   05-APR-2001  (first entry)
XX
DE   Flt1 receptor fusion protein Mut2:Flt1(2-3deltaB)-Fc.
XX
KW   Flt1 receptor; fusion protein; chimeric protein; pharmacokinetic;
KW   plasma leakage; vascular permeability; IgG Fc region.
XX
OS   Unidentified.
XX
PN   WO200075319-A1.
XX
PD   14-DEC-2000.
XX
PF   23-MAY-2000; 2000WO-US014142.
XX
PR   08-JUN-1999;   99US-0138133P.
XX
PA   (REGE-) REGENERON PHARM INC.
XX
PI   Papadopoulos NJ,  Davis S,  Yancopoulos GD;
XX
DR   WPI; 2001-071076/08.
DR   N-PSDB; AAA91071.
XX
PT   Nucleic acid molecule encoding mammalian phospholipid transfer protein,
PT   and its fragments, useful for diagnosis, evaluation, and treatment of
PT   diseases associated with the gene expression and for producing model
PT   systems.
XX
PS   Claim 49; Fig 14; 159pp; English.
XX
CC   This sequence represents a fusion protein of the invention between the
CC   Flt1 receptor and the Fc region of IgG. The specification relates to
CC   modified chimeric polypeptides with improved pharmacokinetics. The
CC   modified chimeric polypeptides are preferably Flt1 receptor polypeptides
CC   that have been modified to improve their pharmacokinetic profile. The
CC   polypeptides can be used to decrease or inhibit plasma leakage and/or
CC   vascular permeability in a mammal
XX
SQ   Sequence 452 AA;

  Query Match             100.0%;  Score 1263;  DB 4;  Length 452;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 280

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 340

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 400

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 452


RESULT 150
ABP52444
ID   ABP52444 standard; protein; 452 AA.
XX
AC   ABP52444;
XX
DT   23-OCT-2002  (first entry)
XX
DE   Mutation 2 Flt1(2-3 delta B)-Fc protein sequence.
XX
KW   Human; Flt1; vascular endothelial growth factor; VEGF; VEGF antagonist;
KW   psoriasis; wound healing; Flt1 receptor; antipsoriatic; antiinflammatory;
KW   vulnerary; antiasthmatic; antirheumatic; antiarthritic; nephrotropic;
KW   ophthalmological; vascular permeability; oedema; inflammation; asthma;
KW   brain oedema; inflammatory disorder; rheumatoid arthritis; burn;
KW   kidney disease; eye disorder; age-related macular degeneration;
KW   diabetic retinopathy.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200260489-A1.
XX
PD   08-AUG-2002.
XX
PF   28-JAN-2002; 2002WO-US002466.
XX
PR   31-JAN-2001; 2001US-00773877.
XX
PA   (REGE-) REGENERON PHARM INC.
XX
PI   Xia Y,  Rudge JS,  Yancopoulos GD;
XX
DR   WPI; 2002-608488/65.
DR   N-PSDB; ABQ74605.
XX
PT   Treating psoriasis and enhancing wound healing in humans comprises the
PT   administration of a vascular endothelial cell growth factor (VEGF)
PT   antagonist.
XX
```

PS Example 12; Fig 14A-C; 179pp; English.
XX
CC The present invention describes a method for treating psoriasis and
CC enhancing wound healing in a mammal or a human. The method comprises
CC administering a vascular endothelial cell growth factor (VEGF) antagonist
CC to the mammal or human. A VEGF antagonist has antipsoriatic,
CC antiinflammatory, vulnerary, antiasthmatic, antirheumatic, antiarthritic,
CC nephrotropic and ophthalmological activities. The method can be used in
CC treating psoriasis and enhancing wound healing in humans by administering
CC VEGF antagonist. The method is also useful in treating clinical
CC conditions characterised by vascular permeability, oedema or
CC inflammation, such as brain oedema associated with injury, oedema
CC associated with inflammatory disorders (e.g. rheumatoid arthritis),
CC asthma, burns, kidney diseases, or eye disorders such as age-related
CC macular degeneration and diabetic retinopathy. The method may also be
CC used in making the polypeptide to decrease or inhibit plasma leakage and
CC or vascular permeability. The present sequence represents Mut2:Flt1(2-3
CC delta B)-Fc which is used in an example from the present invention
XX
SQ Sequence 452 AA;

Query Match 100.0%; Score 1263; DB 5; Length 452;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 280

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 340

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 400

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 452
```

RESULT 151
ABP58287
ID ABP58287 standard; protein; 453 AA.
XX
AC ABP58287;
XX
DT 23-OCT-2003 (revised)
DT 31-MAR-2003 (first entry)
XX
DE Humanised 10D5 antibody heavy chain.
XX
KW Monoclonal antibody; 10D5; complementarity determining region; CDR;
KW mouse; human; humanised antibody; antibody; Alzheimer's disease;
KW Down's syndrome; cerebral amyloid angiopathy; neuroprotective; nootropic.
XX
OS Mus sp.
OS Homo sapiens.
OS Chimeric.
XX
FH Key Location/Qualifiers
FT Region 1. .123
FT /note= "light chain variable region"
FT Region 31. .35
FT /note= "CDR1"
FT Region 52. .67
FT /note= "CDR2"
FT Region 100. .112
FT /note= "CDR3"
XX
PN WO200288307-A2.
XX
PD 07-NOV-2002.
XX
PF 26-APR-2002; 2002WO-US011854.
XX
PR 30-APR-2001; 2001US-0287653P.
XX
PA (ELIL) LILLY & CO ELI.
XX
PI Hinton PR, Vasquez M;
XX
DR WPI; 2003-183836/18.
XX
PT New humanized 10D5 antibody, useful for the manufacture of a medicament
PT for treating Down's syndrome, clinical or pre-clinical Alzheimer's
PT disease or cerebral amyloid angiopathy.
XX
PS Claim 5; Page 10-12; 52pp; English.
XX
CC The present sequence is the protein sequence of the heavy chain of a
CC humanised antibody of the present invention. In the variable portion, the
CC complementarity determining regions (CDRs) originate from murine
CC monoclonal antibody 10D5 and the framework region originates from human
CC germline VH segment DP-28 and J segment JH4. Novel humanised antibodies
CC of the invention have CDRs from 10D5 and human framework sequences. These
CC humanised antibodies have binding affinities (affinity and epitope
CC location) approximately the same as those of the mouse 10D5 antibody. The
CC invention includes antibodies, single chain antibodies, and their
CC fragments, as well as nucleotide sequences, vectors, transformed host
CC cells, and methods of using the humanised antibody to treat, prevent,
CC alleviate, reverse or otherwise ameliorate symptoms and/or pathology
CC associated with Down's syndrome, (pre-)clinical Alzheimer's disease or
CC (pre-)clinical cerebral amyloid angiopathy, and to inhibit formation or
CC reduce Abeta plaque in the brain. (Updated on 23-OCT-2003 to standardise
CC OS field)
XX
SQ Sequence 453 AA;

Query Match 100.0%; Score 1263; DB 6; Length 453;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 281

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 341

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        342 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 401

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        402 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 453
```

RESULT 152
ABP96295
ID ABP96295 standard; protein; 453 AA.
XX
AC ABP96295;
XX
DT 20-MAY-2003 (first entry)
XX
DE 4A5-3.1.1-B4 antibody amino acid sequence #2.
XX
KW Anti-hTNFSF13b human antibody; antibody; human; TNFSF13b; antiulcer;
KW immunosuppressive; antiinflammatory; dermatological; antirheumatic;
KW antiarthritic; antiasthmatic; antiallergic; antipsoriatic; antiparasitic;
KW antiinfertility; antithyroid; thyromimetic; haemostatic; cytostatic;
KW tumour necrosis factor antagonist; TNF antagonist; rheumatoid arthritis;

```
KW   systemic lupus erythematosus; juvenile chronic arthritis; Lyme arthritis;
KW   Crohn's disease; ulcerative colitis; inflammatory bowel disease; asthma;
KW   allergic disease; psoriasis; immune disease; organ transplant rejection;
KW   graft-versus-host disease; sarcoidosis; infectious disease; cancer;
KW   parasitic disease; female infertility; autoimmune thrombocytopaenia;
KW   autoimmune thyroid disease; Hashimoto's disease; Sjogren's syndrome.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Region          24. .34
FT                   /label= CDR1
FT   Region          50. .56
FT                   /label= CDR2
FT   Region          89. .97
FT                   /label= CDR3
XX
PN   WO2003016468-A2.
XX
PD   27-FEB-2003.
XX
PF   15-AUG-2002; 2002WO-US021842.
XX
PR   16-AUG-2001; 2001US-0312808P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Gelfanova VP,  Hale JE,  Kikly KK,  Witcher DR,  Rathnachalam R;
XX
DR   WPI; 2003-268308/26.
XX
PT   New anti-hTNFSF13b human antibody, useful in manufacturing a medicament
PT   for inhibiting TNFSF13b activity in a subject suffering from a disorder
PT   in which TNFSF13b activity is detrimental, e.g. asthma, cancer or
PT   rheumatoid arthritis.
XX
PS   Example 8; Page 34; 52pp; English.
XX
CC   The present invention describes an anti-hTNFSF13b human antibody (I). (I)
CC   has immunosuppressive, antiinflammatory, dermatological, antiulcer,
CC   antirheumatic, antiarthritic, antiasthmatic, antiallergic, antipsoriatic,
CC   antiparasitic, antiinfertility, antithyroid, thyromimetic, haemostatic
CC   and cytostatic activities, and can be used as a tumour necrosis factor
CC   (TNF) antagonist. The anti-hTNFSF13b human antibody or an antibody that
CC   neutralises TNFSF13b activity by binding an epitope of TNFSF13b is useful
CC   in manufacturing a medicament for administering to a subject suffering
CC   from a disorder in which TNFSF13b activity is detrimental, e.g. systemic
CC   lupus erythematosus, rheumatoid arthritis, juvenile chronic arthritis,
CC   Lyme arthritis, Crohn's disease, ulcerative colitis, inflammatory bowel
CC   disease, asthma, allergic diseases, psoriasis, acute or chronic immune
CC   disease associated with organ transplantation, organ transplant
CC   rejection, graft-versus-host disease, sarcoidosis, infectious diseases,
CC   parasitic diseases, female infertility, autoimmune thrombocytopaenia,
CC   autoimmune thyroid disease, Hashimoto's disease, Sjogren's syndrome, or
CC   cancer. The present sequence represents a 4A5-3.1.1-B4 antibody amino
CC   acid sequence, which is used in an example from the present invention
XX
SQ   Sequence 453 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 453;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 281

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 341

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        342 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 401

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        402 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 453


RESULT 153
AAR42066
ID   AAR42066 standard; protein; 459 AA.
XX
AC   AAR42066;
XX
DT   25-MAR-2003  (revised)
DT   29-APR-1994  (first entry)
XX
DE   Human anti-HBs heavy chain.
XX
KW   Antibody; Ab; light; heavy; chain; hepatitis B; HB; surface antigen.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .9
FT                   /label= sig_peptide
FT   Protein         10. .459
FT                   /label= mat_protein
XX
PN   WO9320205-A1.
XX
PD   14-OCT-1993.
XX
PF   30-MAR-1993;   93WO-JP000396.
XX
PR   30-MAR-1992;   92JP-00074678.
XX
PA   (SUNR ) SUNTORY LTD.
XX
PI   Kurihara T,  Matsukura S,  Tsuruoka N,  Arima K,  Nishihara T;
XX
DR   WPI; 1993-336913/42.
DR   N-PSDB; AAQ49944.
XX
PT   Human anti-hepatitis B surface antigen antibody gene - can be used to
PT   produce L and H chains of the antibody in large quantity.
XX
PS   Disclosure; Fig 6-8; 46pp; Japanese.
XX
CC   Polynucleotides encoding the L and H chains of human anti-HBs Ab are
CC   given in AAQ49943-Q49944. The Ab can be easily produced in large
CC   quantities for therapeutic use. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 459 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 459;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        228 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 287

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        288 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 347

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        348 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 407

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
```

```
                  ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        408 PVLDSDGSPFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 459
```

RESULT 154
ADR86700
ID ADR86700 standard; protein; 459 AA.
XX
AC ADR86700;
XX
DT 16-DEC-2004 (first entry)
XX
DE Ephrin B2 extracellular domain B2EC-FC.
XX
KW cytostatic; antiinflammatory; antirheumatic; antipsoriatic;
KW dermatological; ophthalmological; gene therapy; EphB4; Ephrin B2;
KW pharmaceutical; cosmetic; diagnostic; Ephrin B2/EphB4 pathway; tumour;
KW angiogenesis-associated disease; inflammatory disorder;
KW chronic articular rheumatism; psoriasis; ocular angiogenic disease;
KW scleroderma; human; ephrin B2; extracellular domain; B2EC-FC.
XX
OS Homo sapiens.
XX
PN WO2004080425-A2.
XX
PD 23-SEP-2004.
XX
PF 12-MAR-2004; 2004WO-US007755.
XX
PR 12-MAR-2003; 2003US-0454300P.
PR 12-MAR-2003; 2003US-0454432P.
XX
PA (VASG-) VASGENE THERAPEUTICS INC.
XX
PI Krasnoperov V, Zozulya S, Keretesz N, Reddy R, Gill P;
XX
DR WPI; 2004-668883/65.
XX
PT New soluble polypeptides comprising an extracellular domain of EphB4 or
PT Ephrin B2 protein for diagnosing or treating cancer or angiogenesis-
PT associated diseases, such as inflammatory disorders, psoriasis or
PT scleroderma.
XX
PS Example 1; Fig 5; 198pp; English.
XX
CC The invention describes an isolated soluble polypeptide comprising an
CC amino acid sequence of an extracellular domain of an EphB4 or Ephrin B2
CC protein. The EphB4 or Ephrin B2 polypeptide is a monomer, the EphB4
CC polypeptide binds specifically to the Ephrin B2 polypeptide, and the
CC Ephrin B2 polypeptide binds specifically to the EphB4 polypeptide. Also
CC described are: an antagonist antibody that binds to an extracellular
CC domain of the EphB4 or Ephrin B2 protein and inhibits an activity of the
CC EphB4 or Ephrin B2; a pharmaceutical or cosmetic composition, or a
CC diagnostic kit, comprising the above soluble polypeptide or antagonist
CC antibody, and a pharmaceutical carrier; methods of inhibiting
CC angiogenesis or inhibiting signaling through Ephrin B2/EphB4 pathway in a
CC cell; a method of reducing the growth rate of a tumour; methods for
CC treating a patient suffering from a cancer or an angiogenesis-associated
CC disease; and a method for identifying a tumor that is suitable for
CC treatment with an EphrinB2 or EphB4 antagonist. The polypeptide or
CC antibody is useful for manufacturing a medicament for the treatment of
CC cancer or an angiogenesis-associated disease. The composition and methods
CC are useful for diagnosing or treating cancer or angiogenesis-associated
CC diseases, such as inflammatory disorders, chronic articular rheumatism,
CC psoriasis, ocular angiogenic diseases or scleroderma. This is the amino
CC acid sequence of human ephrin B2 extracellular domain B2EC-FC.
XX
SQ Sequence 459 AA;

  Query Match   100.0%; Score 1263; DB 8; Length 459;
  Best Local Similarity 100.0%; Pred. No. 3.4e-91;
  Matches 232; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        228 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 287

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        288 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 347

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        348 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 407

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        408 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 459
```

RESULT 155
ADR82647
ID ADR82647 standard; protein; 459 AA.
XX
AC ADR82647;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human B2EC-FC protein.
XX
KW human; EphB4; EphrinB2; cancer; angiogenesis-associated disease;
KW inflammatory disorder; chronic articular rheumatism; psoriasis;
KW ocular angiogenic disease; scleroderma; cytostatic; antiinflammatory;
KW antirheumatic; antipsoriatic; dermatological; ophthalmological;
KW angiogenesis inhibitor.
XX
OS Homo sapiens.
XX
PN WO2004080418-A2.
XX
PD 23-SEP-2004.
XX
PF 12-MAR-2004; 2004WO-US007491.
XX
PR 12-MAR-2003; 2003US-0454300P.
PR 12-MAR-2003; 2003US-0454432P.
XX
PA (VASG-) VASGENE THERAPEUTICS INC.
XX
PI Reddy R, Gill P;
XX
DR WPI; 2004-668879/65.
XX
PT New isolated nucleic acid compounds that hybridize to EphB4 or EphrinB2
PT transcripts or decrease the expression of EphB4 or EphrinB2 in cells,
PT useful for diagnosing or treating cancer or angiogenesis-associated
PT diseases.
XX
PS Disclosure; Fig 5; 206pp; English.
XX
CC The invention relates to an isolated nucleic acid compound comprising at
CC least a portion that hybridises to an EphB4 or EphrinB2 transcript under
CC physiological conditions and decreases the expression of EphB4 or
CC EphrinB2 in a cell. The nucleic acid is useful for manufacturing a
CC medicament for the treatment of cancer or angiogenesis-associated
CC diseases. The composition and methods are useful for diagnosing or
CC treating cancer or angiogenesis-associated diseases, such as inflammatory
CC disorders, chronic articular rheumatism, psoriasis, ocular angiogenic
CC diseases or scleroderma. The present sequence represents the amino acid
CC sequence of human B2EC-FC protein.
XX
SQ Sequence 459 AA;

  Query Match   100.0%; Score 1263; DB 8; Length 459;
  Best Local Similarity 100.0%; Pred. No. 3.4e-91;
  Matches 232; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        228 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 287

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        288 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 347

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        348 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 407

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        408 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 459
```

RESULT 156
AAY69890
ID AAY69890 standard; protein; 460 AA.
XX
AC AAY69890;
XX
DT 24-MAY-2000 (first entry)
XX
DE Human NR8alpha/IgG-Fc fusion protein.
XX
KW Haemopoietin receptor family; NR8; antibody; diagnosis;
KW blood formation disorder; fusion protein; immunoglobulin.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO9967290-A1.
XX
PD 29-DEC-1999.
XX
PF 23-JUN-1999; 99WO-JP003351.
XX
PR 24-JUN-1998; 98JP-00214720.
PR 19-OCT-1998; 98JP-00297409.
XX
PA (CHUS) CHUGAI RES INST MOLECULAR MEDICINE INC.
XX
PI Nomura H, Maeda M;
XX
DR WPI; 2000-116933/10.
DR N-PSDB; AAZ59248.
XX
PT Hemopoietin receptor protein family NR8 used for diagnosis of blood
PT formation disorders.
XX
PS Example 6; Page 132-136; 176pp; Japanese.
XX
CC This sequence represents a fusion protein comprising the haemopoietin
CC receptor protein family NR8alpha gene (AAY69883) fused to a human
CC immunoglobulin IgG1-Fc. Antibodies to the NR8 family proteins are used
CC for the diagnosis of blood formation disorders. Compounds identified as
CC binding to the proteins are used for the treatment of such disorders
XX
SQ Sequence 460 AA;

Query Match 100.0%; Score 1263; DB 3; Length 460;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        229 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 288

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        289 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 348

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        349 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 408

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        409 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 460
```

RESULT 157
AAR42162
ID AAR42162 standard; protein; 461 AA.
XX
AC AAR42162;
XX
DT 25-MAR-2003 (revised)
DT 27-APR-1994 (first entry)
XX
DE Anti-HIV-1 recombinant antibody 447-52D heavy chain.
XX
KW Human Immunodeficiency Virus; antigen; ELISA; recombinant antibody;
KW HIV-neutralising monoclonal antibody; immunoglobulin; AIDS;
KW acquired immune deficiency syndrome; chimeric antibody;
KW surface glycoprotein gp120; V3 loop.
XX
OS Homo sapiens.
XX
PN WO9319785-A1.
XX
PD 14-OCT-1993.
XX
PF 23-MAR-1993; 93WO-US002629.
XX
PR 01-APR-1992; 92US-00861701.
XX
PA (MERI) MERCK & CO INC.
XX
PI Emini EA, Conley AJ, Mark GE, Johnson LS, Pfarr DS;
XX
DR WPI; 1993-336600/42.
DR N-PSDB; AAQ49834.
XX
PT New recombinant human antibody - with HIV neutralising activity against
PT at least two isolates, useful for preventing or treating infection in
PT diagnosis, etc.
XX
PS Example 9; Fig 2A; 154pp; English.
XX
CC EBV-transformed cell lines and mouse-human heterohybridomas producing
CC human MAbs specific for the gp120 V3 loop of HIV-1 MN isolate were
CC obtained. MAb 447-52D was found to recognise the tetrapeptide motif GPGR,
CC i.e. the Principal Neutralising Determinant common to the V3 loop of
CC different HIV isolates. A recombinant Ab was produced in which the H
CC chain V region was derived from 447-52D and to which a signal sequence
CC and a H chain intronic sequence are appended, fused to a fragment contg.
CC a short intronic segment of the human gamma 1 C region and the human
CC gamma 1 encoding domain in its genomic form. (Updated on 25-MAR-2003 to
CC correct PN field.)
XX
SQ Sequence 461 AA;

Query Match 100.0%; Score 1263; DB 2; Length 461;
Best Local Similarity 100.0%; Pred. No. 3.4e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        230 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 289

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        290 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 409

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        410 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 461


RESULT 158
AAU07745
ID   AAU07745 standard; protein; 461 AA.
XX
AC   AAU07745;
XX
DT   04-DEC-2001  (first entry)
XX
DE   Humanised monoclonal antibody Hu266, heavy chain.
XX
KW   Monoclonal antibody; Hu266; nootropic; neuroprotective; Abeta peptide;
KW   Alzheimer's disease; Down's syndrome; cerebral amyloid angiopathy;
KW   gene therapy.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /label= Signal_peptide
FT   Protein         20. .461
FT                   /label= Mature_Hu266_heavy_chain
FT                   /note= "This sequence is specifically claimed in claim
FT                   17"
XX
PN   WO200162801-A2.
XX
PD   30-AUG-2001.
XX
PF   26-FEB-2001; 2001WO-US006191.
XX
PR   24-FEB-2000; 2000US-0184601P.
PR   08-DEC-2000; 2000US-0254465P.
PR   08-DEC-2000; 2000US-0254498P.
XX
PA   (UNIW ) UNIV WASHINGTON.
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Holtzman DM,  Demattos R,  Bales KR,  Paul SM,  Tsurushita N;
PI   Vasquez M;
XX
DR   WPI; 2001-550087/61.
XX
PT   New humanized antibody for the treatment of Alzheimer's comprises the
PT   inhibition and reduction of the formation of amyloid plaques.
XX
PS   Example 13; Fig 5; 63pp; English.
XX
CC   The invention relates a humanised antibody that specifically binds an
CC   epitope contained within positions 13-28 of amyloid beta peptide, Abeta.
CC   The antibody is useful to inhibit and reduce the formation of amyloid
CC   plaques or the effects of toxic soluble Abeta species in humans their
CC   fragments are used for the manufacture of a medicant. This includes the
CC   prolonged expression of recombinant sequences of them in human tissues
CC   for the treatment of clinical/pre-clinical Alzheimer's disease, Down's
CC   syndrome or pre clinical cerebral amyloid angiopathy. Specifically, the
CC   antibody is used to sequester Abeta into plasma, brain or cerebrospinal
CC   fluid to prevent/reverse accumulation of the Abeta peptide within the
CC   brain thereby improving cognition. The present sequence is the heavy
CC   chain of a humanised monoclonal antibody, Hu266, based on the mouse
CC   antibody 266
XX
SQ   Sequence 461 AA;

  Query Match           100.0%;  Score 1263;  DB 4;  Length 461;
  Best Local Similarity  100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        230 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 289

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        290 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 409

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        410 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 461


RESULT 159
ABR39844
ID   ABR39844 standard; protein; 461 AA.
XX
AC   ABR39844;
XX
DT   18-AUG-2003  (first entry)
XX
DE   Hu266 N56T heavy chain.
XX
KW   Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;
KW   immunostimulant.
XX
OS   Homo sapiens.
XX
PN   WO2003016466-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US021322.
XX
PR   17-AUG-2001; 2001US-0313224P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Jia AY,  Tsurushita N,  Vasquez MJ;
XX
DR   WPI; 2003-278557/27.
DR   N-PSDB; ACC47228.
XX
PT   New antibodies comprising a heavy chain and a light chain complementarity
PT   determining regions from antibody 266, for treating and preventing
PT   conditions associated with the A beta peptide, e.g. Alzheimer's disease
PT   or Down syndrome.
XX
PS   Disclosure; Fig 3; 82pp; English.
XX
CC   The invention relates to an anti-Abeta (amyloid-beta peptide) antibody
CC   266. The antibodies are useful for treating and preventing conditions
CC   associated with the Abeta peptide, such as Alzheimer's disease, Down
CC   syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in
CC   humans; for determining whether a human subject will respond to treatment
CC   using humanized antibodies against Abeta; for treating, preventing and
CC   reversing cognitive decline in clinical or pre-clinical Alzheimer's
CC   disease, Down's syndrome or cerebral amyloid angiopathy; for inhibiting
CC   formation of amyloid plaques of the effects of toxic soluble Abeta
CC   species in humans. Treatment of the patients with antibody will inhibit
CC   or prevent cognitive decline typically associated with disease
CC   progression and reverses it. The present sequence represents a humanised
```

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CC   anti-Abeta antibody 266 N56T heavy chain
XX
SQ   Sequence 461 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 461;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        230 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 289

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        290 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 409

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        410 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 461


RESULT 160
ABR39847
ID   ABR39847 standard; protein; 461 AA.
XX
AC   ABR39847;
XX
DT   18-AUG-2003  (first entry)
XX
DE   Hu266 N56S heavy chain.
XX
KW   Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;
KW   immunostimulant.
XX
OS   Homo sapiens.
XX
PN   WO2003016466-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US021322.
XX
PR   17-AUG-2001; 2001US-0313224P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Jia AY,  Tsurushita N,  Vasquez MJ;
XX
DR   WPI; 2003-278557/27.
DR   N-PSDB; ACC47231.
XX
PT   New antibodies comprising a heavy chain and a light chain complementarity
PT   determining regions from antibody 266, for treating and preventing
PT   conditions associated with the A beta peptide, e.g. Alzheimer's disease
PT   or Down syndrome.
XX
PS   Disclosure; Fig 6; 82pp; English.
XX
CC   The invention relates to an anti-Abeta (amyloid-beta peptide) antibody
CC   266. The antibodies are useful for treating and preventing conditions
CC   associated with the Abeta peptide, such as Alzheimer's disease, Down
CC   syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in
CC   humans; for determining whether a human subject will respond to treatment
CC   using humanized antibodies against Abeta; for treating, preventing and
CC   reversing cognitive decline in clinical or pre-clinical Alzheimer's
CC   disease, Down's syndrome or cerebral amyloid angiopathy; for inhibiting
CC   formation of amyloid plaques of the effects of toxic soluble Abeta
CC   species in humans. Treatment of the patients with antibody will inhibit
CC   or prevent cognitive decline typically associated with disease
CC   progression and reverses it. The present sequence represents a humanised
CC   anti-Abeta antibody 266 N56S heavy chain
XX
SQ   Sequence 461 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 461;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        230 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 289

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        290 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 409

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        410 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 461


RESULT 161
ABR39843
ID   ABR39843 standard; protein; 461 AA.
XX
AC   ABR39843;
XX
DT   18-AUG-2003  (first entry)
XX
DE   Hu266 N56S heavy chain.
XX
KW   Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;
KW   immunostimulant.
XX
OS   Homo sapiens.
XX
PN   WO2003016466-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US021322.
XX
PR   17-AUG-2001; 2001US-0313224P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Jia AY,  Tsurushita N,  Vasquez MJ;
XX
DR   WPI; 2003-278557/27.
DR   N-PSDB; ACC47227.
XX
PT   New antibodies comprising a heavy chain and a light chain complementarity
PT   determining regions from antibody 266, for treating and preventing
PT   conditions associated with the A beta peptide, e.g. Alzheimer's disease
PT   or Down syndrome.
XX
PS   Disclosure; Fig 2; 82pp; English.
XX
CC   The invention relates to an anti-Abeta (amyloid-beta peptide) antibody
CC   266. The antibodies are useful for treating and preventing conditions
CC   associated with the Abeta peptide, such as Alzheimer's disease, Down
CC   syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in
CC   humans; for determining whether a human subject will respond to treatment
CC   using humanized antibodies against Abeta; for treating, preventing and
CC   reversing cognitive decline in clinical or pre-clinical Alzheimer's
CC   disease, Down's syndrome or cerebral amyloid angiopathy; for inhibiting
CC   formation of amyloid plaques of the effects of toxic soluble Abeta
CC   species in humans. Treatment of the patients with antibody will inhibit
```

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CC   or prevent cognitive decline typically associated with disease
CC   progression and reverses it. The present sequence represents a humanised
CC   anti-Abeta antibody 266 N56S heavy chain
XX
SQ   Sequence 461 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 461;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        230 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 289

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        290 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 409

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        410 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 461


RESULT 162
ABR39848
ID   ABR39848 standard; protein; 461 AA.
XX
AC   ABR39848;
XX
DT   18-AUG-2003  (first entry)
XX
DE   Hu266 N56T heavy chain.
XX
KW   Amyloid-beta; Abeta; antibody 266; nootropic; neuroprotective; CDR;
KW   immunostimulant.
XX
OS   Homo sapiens.
XX
PN   WO2003016466-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US021322.
XX
PR   17-AUG-2001; 2001US-0313224P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Jia AY,  Tsurushita N,  Vasquez MJ;
XX
DR   WPI; 2003-278557/27.
DR   N-PSDB; ACC47232.
XX
PT   New antibodies comprising a heavy chain and a light chain complementarity
PT   determining regions from antibody 266, for treating and preventing
PT   conditions associated with the A beta peptide, e.g. Alzheimer's disease
PT   or Down syndrome.
XX
PS   Disclosure; Fig 7; 82pp; English.
XX
CC   The invention relates to an anti-Abeta (amyloid-beta peptide) antibody
CC   266. The antibodies are useful for treating and preventing conditions
CC   associated with the Abeta peptide, such as Alzheimer's disease, Down
CC   syndrome, and cerebral amyloid angiopathy; for diagnosing diseases in
CC   humans; for determining whether a human subject will respond to treatment
CC   using humanized antibodies against Abeta; for treating, preventing and
CC   reversing cognitive decline in clinical or pre-clinical Alzheimer's
CC   disease, Down's syndrome or cerebral amyloid angiopathy; for inhibiting
CC   formation of amyloid plaques of the effects of toxic soluble Abeta
CC   species in humans. Treatment of the patients with antibody will inhibit
CC   or prevent cognitive decline typically associated with disease
CC   progression and reverses it. The present sequence represents a humanised
CC   anti-Abeta antibody 266 N56T heavy chain
XX
SQ   Sequence 461 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 461;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        230 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 289

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        290 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 409

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        410 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 461


RESULT 163
ABJ39025
ID   ABJ39025 standard; protein; 461 AA.
XX
AC   ABJ39025;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Fusion protein of the extracellular domain of mouse SJ2368 & Fc fragment.
XX
KW   Class II cytokine receptor; SJ2368; autoimmune; inflammatory; cytostatic;
KW   allergic disease; septicaemia; tumour; immunosuppressive; antiallergic;
KW   antiinflammatory; mouse; human.
XX
OS   Mus sp.
OS   Unidentified.
XX
PN   WO2003031620-A1.
XX
PD   17-APR-2003.
XX
PF   02-OCT-2002; 2002WO-JP010280.
XX
PR   02-OCT-2001; 2001JP-00306851.
PR   12-JUL-2002; 2002JP-00204385.
XX
PA   (MOCH ) MOCHIDA PHARM CO LTD.
PA   (KAZU-) KAZUSA DNA RES INST.
XX
PI   Ohara O,  Nagase T,  Katou Y,  Takahashi T,  Ohkawa K,  Shirakawa K;
XX
DR   WPI; 2003-381719/36.
XX
PT   Class II cytokine receptor SJ2368 and regulators of its activity and
PT   expression for treatment and diagnosis of autoimmune, inflammatory and
PT   allergic diseases and tumours.
XX
PS   Example 8; Page 164-167; 188pp; Japanese.
XX
CC   This invention relates to the class II cytokine receptor gene SJ2368 and
CC   the encoded protein, derived from either a mouse or human origin.
CC   Agonists or antagonists of the cytokine receptor SJ2368 can be used for
CC   the treatment and diagnosis of autoimmune, inflammatory and allergic
CC   diseases, as well as for treating the effects of septicaemia and for
CC   tumours. Accordingly, they can be described as having immunosuppressive,
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CC   antiinflammatory, antiallergic and/ or cytostatic activity. This
CC   polypeptide sequence is related to the class II cytokine receptor SJ2368
CC   of the invention
XX
SQ   Sequence 461 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 461;
  Best Local Similarity   100.0%;  Pred. No. 3.4e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        230 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 289

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        290 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 349

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        350 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 409

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        410 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 461


RESULT 164
AAY97592
ID   AAY97592 standard; protein; 462 AA.
XX
AC   AAY97592;
XX
DT   05-APR-2001  (first entry)
XX
DE   Flt1 receptor fusion protein Mut3:Flt1(2-3)-Fc.
XX
KW   Flt1 receptor; fusion protein; chimeric protein; pharmacokinetic;
KW   plasma leakage; vascular permeability; IgG Fc region.
XX
OS   Unidentified.
XX
PN   WO200075319-A1.
XX
PD   14-DEC-2000.
XX
PF   23-MAY-2000; 2000WO-US014142.
XX
PR   08-JUN-1999;   99US-0138133P.
XX
PA   (REGE-) REGENERON PHARM INC.
XX
PI   Papadopoulos NJ,  Davis S,  Yancopoulos GD;
XX
DR   WPI; 2001-071076/08.
DR   N-PSDB; AAA91072.
XX
PT   Nucleic acid molecule encoding mammalian phospholipid transfer protein,
PT   and its fragments, useful for diagnosis, evaluation, and treatment of
PT   diseases associated with the gene expression and for producing model
PT   systems.
XX
PS   Claim 49; Fig 15; 159pp; English.
XX
CC   This sequence represents a fusion protein of the invention between the
CC   Flt1 receptor and the Fc region of IgG. The specification relates to
CC   modified chimeric polypeptides with improved pharmacokinetics. The
CC   modified chimeric polypeptides are preferably Flt1 receptor polypeptides
CC   that have been modified to improve their pharmacokinetic profile. The
CC   polypeptides can be used to decrease or inhibit plasma leakage and/or
CC   vascular permeability in a mammal
XX
SQ   Sequence 462 AA;

  Query Match             100.0%;  Score 1263;  DB 4;  Length 462;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 290

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 350

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 410

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 462


RESULT 165
ABP52445
ID   ABP52445 standard; protein; 462 AA.
XX
AC   ABP52445;
XX
DT   23-OCT-2002  (first entry)
XX
DE   Mutation 3 Flt1(2-3)-Fc protein sequence.
XX
KW   Human; Flt1; vascular endothelial growth factor; VEGF; VEGF antagonist;
KW   psoriasis; wound healing; Flt1 receptor; antipsoriatic; antiinflammatory;
KW   vulnerary; antiasthmatic; antirheumatic; antiarthritic; nephrotropic;
KW   ophthalmological; vascular permeability; oedema; inflammation; asthma;
KW   brain oedema; inflammatory disorder; rheumatoid arthritis; burn;
KW   kidney disease; eye disorder; age-related macular degeneration;
KW   diabetic retinopathy.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200260489-A1.
XX
PD   08-AUG-2002.
XX
PF   28-JAN-2002; 2002WO-US002466.
XX
PR   31-JAN-2001; 2001US-00773877.
XX
PA   (REGE-) REGENERON PHARM INC.
XX
PI   Xia Y,  Rudge JS,  Yancopoulos GD;
XX
DR   WPI; 2002-608488/65.
DR   N-PSDB; ABQ74606.
XX
PT   Treating psoriasis and enhancing wound healing in humans comprises the
PT   administration of a vascular endothelial cell growth factor (VEGF)
PT   antagonist.
XX
PS   Example 13; Fig 15A-C; 179pp; English.
XX
CC   The present invention describes a method for treating psoriasis and
CC   enhancing wound healing in a mammal or a human. The method comprises
CC   administering a vascular endothelial cell growth factor (VEGF) antagonist
CC   to the mammal or human. A VEGF antagonist has antipsoriatic,
CC   antiinflammatory, vulnerary, antiasthmatic, antirheumatic, antiarthritic,
CC   nephrotropic and ophthalmological activities. The method can be used in
CC   treating psoriasis and enhancing wound healing in humans by administering
CC   VEGF antagonist. The method is also useful in treating clinical
CC   conditions characterised by vascular permeability, oedema or
```

CC inflammation, such as brain oedema associated with injury, oedema
CC associated with inflammatory disorders (e.g. rheumatoid arthritis),
CC asthma, burns, kidney diseases, or eye disorders such as age-related
CC macular degeneration and diabetic retinopathy. The method may also be
CC used in making the polypeptide to decrease or inhibit plasma leakage and
CC or vascular permeability. The present sequence represents Mut3:Flt1(2-3)
CC -Fc which is used in an example from the present invention
XX
SQ Sequence 462 AA;

Query Match 100.0%; Score 1263; DB 5; Length 462;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 290

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 350

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 410

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 462
```

RESULT 166
ABJ39027
ID ABJ39027 standard; protein; 462 AA.
XX
AC ABJ39027;
XX
DT 17-OCT-2003 (first entry)
XX
DE Fusion protein of the extracellular domain of human SJ2368 & Fc fragment.
XX
KW Class II cytokine receptor; SJ2368; autoimmune; inflammatory; cytostatic;
KW allergic disease; septicaemia; tumour; immunosuppressive; antiallergic;
KW antiinflammatory; mouse; human.
XX
OS Homo sapiens.
OS Unidentified.
XX
PN WO2003031620-A1.
XX
PD 17-APR-2003.
XX
PF 02-OCT-2002; 2002WO-JP010280.
XX
PR 02-OCT-2001; 2001JP-00306851.
PR 12-JUL-2002; 2002JP-00204385.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
PA (KAZU-) KAZUSA DNA RES INST.
XX
PI Ohara O, Nagase T, Katou Y, Takahashi T, Ohkawa K, Shirakawa K;
XX
DR WPI; 2003-381719/36.
XX
PT Class II cytokine receptor SJ2368 and regulators of its activity and
PT expression for treatment and diagnosis of autoimmune, inflammatory and
PT allergic diseases and tumours.
XX
PS Example 4; Page 170-172; 188pp; Japanese.
XX
CC This invention relates to the class II cytokine receptor gene SJ2368 and
CC the encoded protein, derived from either a mouse or human origin.
CC Agonists or antagonists of the cytokine receptor SJ2368 can be used for
CC the treatment and diagnosis of autoimmune, inflammatory and allergic
CC diseases, as well as for treating the effects of septicaemia and for
CC tumours. Accordingly, they can be described as having immunosuppressive,
CC antiinflammatory, antiallergic and/ or cytostatic activity. This
CC polypeptide sequence is related to the class II cytokine receptor SJ2368
CC of the invention
XX
SQ Sequence 462 AA;

Query Match 100.0%; Score 1263; DB 6; Length 462;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 290

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 350

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 410

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 462
```

RESULT 167
ADM97598
ID ADM97598 standard; protein; 462 AA.
XX
AC ADM97598;
XX
DT 01-JUL-2004 (first entry)
XX
DE Mouse monoclonal antibody production method related fusion protein.
XX
KW immunostimulant; antibody production; immune response; disease treatment;
KW human.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO2004031382-A1.
XX
PD 15-APR-2004.
XX
PF 02-OCT-2003; 2003WO-JP012658.
XX
PR 02-OCT-2002; 2002JP-00290442.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
XX
PI Shirakawa K;
XX
DR WPI; 2004-330184/30.
XX
PT Constructing a specific antigen-reactive monoclonal antibody for inducing
PT an immune response e.g. in disease treatment, comprises using hybridoma
PT cells obtainable from mouse lymph-node cells.
XX
PS Disclosure; Page 54-55; 60pp; Japanese.
XX
CC The present invention relates to a method of producing a mouse monoclonal
CC antibody, which comprises mixing an antigen with an oligonucleotide,
CC priming a mouse by administering the mixture, separating a lymph node
CC from the mouse and fusing cells originated in the lymph node with myeloma
CC cells to form hybridomas, and collecting the obtained hybridomas and
CC harvesting an antibody. The thus constructed antibody is useful for
CC inducing a specific immune response e.g. in disease treatment. The

```
CC   present sequence is a fusion protein of human SJ2368 extracellular domain
CC   and Fc shown in the exemplification of the invention.
XX
SQ   Sequence 462 AA;

  Query Match           100.0%;  Score 1263;  DB 8;  Length 462;
  Best Local Similarity  100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 290

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 350

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 410

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 462


RESULT 168
ADM72025
ID   ADM72025 standard; protein; 463 AA.
XX
AC   ADM72025;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Chimeric mouse-human antibody M3C11 heavy chain.
XX
KW   GPC3; glypican 3; anti-GPC3 antibody; cell disruption; anti-cancer;
KW   cytostatic; M3C11.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
PN   WO2004022739-A1.
XX
PD   18-MAR-2004.
XX
PF   04-SEP-2003; 2003WO-JP011318.
XX
PR   04-SEP-2002; 2002WO-JP008999.
XX
PA   (CHUS ) CHUGAI SEIYAKU KK.
XX
PI   Aburatani H,  Midorikawa Y,  Nakano K,  Ohizumi I,  Ito Y,  Tokita S;
XX
DR   WPI; 2004-269573/25.
DR   N-PSDB; ADM72024.
XX
PT   Antibody against the N terminus of glypican 3(GPC3) causes cell
PT   disruption and is useful as an anticancer agent.
XX
PS   Example 4; SEQ ID NO 10; 122pp; Japanese.
XX
CC   The invention relates to an antibody against the N terminus of glypican 3
CC   (GPC3). The antiboduy can be used for causing cell disruption and can be
CC   uses as an anti-cancer agent. The present sequence represents a chimeric
CC   mouse-human antibody M3C11 heavy chain.
XX
SQ   Sequence 463 AA;

  Query Match           100.0%;  Score 1263;  DB 8;  Length 463;
  Best Local Similarity  100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        232 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 291

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        292 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 351

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        352 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 411

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        412 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 463


RESULT 169
AAB72228
ID   AAB72228 standard; protein; 465 AA.
XX
AC   AAB72228;
XX
DT   10-MAY-2001  (first entry)
XX
DE   Humanised 323/A3 (IgG1) antibody heavy chain amino acid sequence.
XX
KW   Anti-Ep-CAM antibody; cyclic adenosine monophosphate; cell synthesis;
KW   chemotherapeutic agent; cytostatic; anti-cancer therapy; cancer;
KW   heavy chain.
XX
OS   Mus sp.
OS   Homo sapiens.
XX
PN   WO200107082-A1.
XX
PD   01-FEB-2001.
XX
PF   23-JUL-1999;   99WO-EP005271.
XX
PR   23-JUL-1999;   99WO-EP005271.
XX
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Knick VC,  Stimmel JB,  Thurmond LM;
XX
DR   WPI; 2001-182729/18.
DR   N-PSDB; AAF63374.
XX
PT   Combination for treating cancer (e.g. breast, gastric or prostate
PT   cancers), or in the manufacture of a medicament for anti-cancer therapy,
PT   comprises an anti-Ep-cyclic adenosine monophosphate antibody with a
PT   chemotherapeutic agent.
XX
PS   Disclosure; Fig 16; 103pp; English.
XX
CC   This invention relates to a combination of an anti-Ep-CAM (cyclic
CC   adenosine monophosphate) antibody with a chemotherapeutic agent, that is
CC   capable of arresting Ep-CAM antigen expressing cells in the synthesis (S)
CC   phase or the second growth phase (M) of cell enlargement (G2)/DNA
CC   replication. The antibody exhibits cytostatic activity and is useful in
CC   the manufacture of a medicament for use in anti-cancer therapy,
CC   characterised in that a chemotherapeutic agent, which is capable of
CC   arresting Ep-CAM antigen expressing cells in S or in G2/M, is co-
CC   administered to a patient with an anti-Ep-CAM antibody. The combination
CC   is useful for treating cancer, particularly colorectal cancer, breast
CC   cancer, gastric cancer, prostate cancer or non-small-cell lung cancer.
CC   The present sequence represents the heavy chain of anti-Ep-CAM antibody
CC   known as humanised 323/A3 (IgG1) which can be used in the combination of
CC   the invention
XX
SQ   Sequence 465 AA;
```

```
  Query Match           100.0%;  Score 1263;  DB 4;  Length 465;
  Best Local Similarity  100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 170
ADL23152
ID   ADL23152 standard; protein; 465 AA.
XX
AC   ADL23152;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Mouse/human ING-1 antibody heavy chain, low/medium risk engineered.
XX
KW   Human; mouse; mutein; bactericidal/permeability-increasing protein; BPI;
KW   Ep-CAM; CAB2.1; recombinant polypeptide production; ING-1; antibody;
KW   anti-CD18 antibody; cosmetic product; mutant.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
OS   Synthetic.
XX
PN   US2003203447-A1.
XX
PD   30-OCT-2003.
XX
PF   31-MAR-2003; 2003US-00404724.
XX
PR   29-MAR-2002; 2002US-0368530P.
XX
PA   (HORW/) HORWITZ A H.
XX
PI   Horwitz AH;
XX
DR   WPI; 2003-875646/81.
DR   N-PSDB; ADL23151.
XX
PT   Producing recombinant polypeptide, useful for treating or diagnosing
PT   comprises culturing cells transformed or transfected with a vector
PT   comprising multiple copies of a transcription unit separated by a
PT   selective marker gene.
XX
PS   Example 6; SEQ ID NO 25; 133pp; English.
XX
CC   The invention relates to producing a recombinant polypeptide comprising
CC   culturing cells, which have been transformed or transfected with a
CC   vector, or its segment comprising multiple copies of a transcription unit
CC   separated by at least one selective marker gene, where the transcription
CC   unit encodes a polypeptide under selective conditions. Also included are
CC   a vector or segment comprising multiple copies of a transcription unit
CC   separated by at least one selective marker gene where the transcription
CC   unit encodes a polypeptide, a host cell comprising an expression vector
CC   or segment and a stable cell line comprising an expression vector or
CC   segment. Each transcription unit is under the control of its own promoter
CC   and 3' untranslated region, where the promoter is an SV40, HSV, bovine
CC   growth hormone, thymidine kinase, MPSV, mouse beta globin, human EF1, MSV
CC   -LTR, RSV, MMTV-LTR, CMV, MLV, Chinese hamster elongation factor or mouse
CC   Abelson LTR promoter. The expression vector further comprises multiple
CC   enhancers. The transcription unit also encodes two different subunits of
CC   a multimeric protein, an immunoglobulin light and heavy chain
CC   polypeptides or at least the variable regions of the immunoglobulin light
CC   and heavy chain polypeptides. It further encodes a BPI protein
CC   (bactericidal/permeability-increasing protein) product. The protein
CC   product BPI protein fragment, BPI analogue, BPI variant or BPI-derived
CC   peptide. The transcription unit encodes an rBPI21 and is under the
CC   control of an hCMV promoter and mouse light chain 3' untranslated region,
CC   where the vector further comprises 0, 1 or 2 copies of a human heavy
CC   chain enhancer and either a gpt or neo gene. Other genes suitable for
CC   expression using the method of the invention are Ep-CAM and CAB2.1 (both
CC   not defined). The immunoglobulin may be the ING-1 chimaeric mouse/human
CC   antibody (or humanised versions or proline substitution mutants) or an
CC   anti-CD18 antibody. The method is useful for producing recombinant
CC   polypeptide. Recombinant polypeptide compositions are useful in
CC   therapies, in diagnostic procedures or as tools in preventive medicine.
CC   Recombinant polypeptides are also found in a wide array of both health
CC   and cosmetic products, used to increase the quality of life. Complex
CC   polypeptide products are also routinely used in research laboratories
CC   both as end products of analyses and as agents in assays for the study or
CC   preparation of other molecules. Advantages of the present invention
CC   includes increased recombinant polypeptide production, increased
CC   production efficiency, greater control and/or regulation over the
CC   qualities of the polypeptide expressed, increased stability of cell
CC   lines, and/or decreased costs for materials, reagents and/or other
CC   resources. The present sequence represents a mutated (humanised or
CC   proline mutant) light or heavy chain from a antibody gene suitable for
CC   inclusion in the transcription unit of the invention.
XX
SQ   Sequence 465 AA;

  Query Match           100.0%;  Score 1263;  DB 7;  Length 465;
  Best Local Similarity  100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 171
ADL23135
ID   ADL23135 standard; protein; 465 AA.
XX
AC   ADL23135;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Mouse/human ING-1 chimeric antibody heavy chain.
XX
KW   Human; mouse; bactericidal/permeability-increasing protein; BPI; Ep-CAM;
KW   CAB2.1; recombinant polypeptide production; ING-1; antibody;
KW   anti-CD18 antibody; cosmetic product.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
```

XX
PN US2003203447-A1.
XX
PD 30-OCT-2003.
XX
PF 31-MAR-2003; 2003US-00404724.
XX
PR 29-MAR-2002; 2002US-0368530P.
XX
PA (HORW/) HORWITZ A H.
XX
PI Horwitz AH;
XX
DR WPI; 2003-875646/81.
DR N-PSDB; ADL23134.
XX
PT Producing recombinant polypeptide, useful for treating or diagnosing
PT comprises culturing cells transformed or transfected with a vector
PT comprising multiple copies of a transcription unit separated by a
PT selective marker gene.
XX
PS Example 6; SEQ ID NO 8; 133pp; English.
XX
CC The invention relates to producing a recombinant polypeptide comprising
CC culturing cells, which have been transformed or transfected with a
CC vector, or its segment comprising multiple copies of a transcription unit
CC separated by at least one selective marker gene, where the transcription
CC unit encodes a polypeptide under selective conditions. Also included are
CC a vector or segment comprising multiple copies of a transcription unit
CC separated by at least one selective marker gene where the transcription
CC unit encodes a polypeptide, a host cell comprising an expression vector
CC or segment and a stable cell line comprising an expression vector or
CC segment. Each transcription unit is under the control of its own promoter
CC and 3' untranslated region, where the promoter is an SV40, HSV, bovine
CC growth hormone, thymidine kinase, MPSV, mouse beta globin, human EF1, MSV
CC -LTR, RSV, MMTV-LTR, CMV, MLV, Chinese hamster elongation factor or mouse
CC Abelson LTR promoter. The expression vector further comprises multiple
CC enhancers. The transcription unit also encodes two different subunits of
CC a multimeric protein, an immunoglobulin light and heavy chain
CC polypeptides or at least the variable regions of the immunoglobulin light
CC and heavy chain polypeptides. It further encodes a BPI protein
CC (bactericidal/permeability-increasing protein) product. The protein
CC product BPI protein fragment, BPI analogue, BPI variant or BPI-derived
CC peptide. The transcription unit encodes an rBPI21 and is under the
CC control of an hCMV promoter and mouse light chain 3' untranslated region,
CC where the vector further comprises 0, 1 or 2 copies of a human heavy
CC chain enhancer and either a gpt or neo gene. Other genes suitable for
CC expression using the method of the invention are Ep-CAM and CAB2.1 (both
CC not defined). The immunoglobulin may be the ING-1 chimaeric mouse/human
CC antibody (or humanised versions or proline substitution mutants) or an
CC anti-CD18 antibody. The method is useful for producing recombinant
CC polypeptide. Recombinant polypeptide compositions are useful in
CC therapies, in diagnostic procedures or as tools in preventive medicine.
CC Recombinant polypeptides are also found in a wide array of both health
CC and cosmetic products, used to increase the quality of life. Complex
CC polypeptide products are also routinely used in research laboratories
CC both as end products of analyses and as agents in assays for the study or
CC preparation of other molecules. Advantages of the present invention
CC includes increased recombinant polypeptide production, increased
CC production efficiency, greater control and/or regulation over the
CC qualities of the polypeptide expressed, increased stability of cell
CC lines, and/or decreased costs for materials, reagents and/or other
CC resources. The present sequence represents a light or heavy chain from a
CC antibody gene suitable for inclusion in the transcription unit of the
CC invention.
XX
SQ Sequence 465 AA;

Query Match 100.0%; Score 1263; DB 7; Length 465;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465

RESULT 172
ADL23150
ID ADL23150 standard; protein; 465 AA.
XX
AC ADL23150;
XX
DT 20-MAY-2004 (first entry)
XX
DE Mouse/human ING-1 antibody heavy chain, low risk engineered.
XX
KW Human; mouse; mutein; bactericidal/permeability-increasing protein; BPI;
KW Ep-CAM; CAB2.1; recombinant polypeptide production; ING-1; antibody;
KW anti-CD18 antibody; cosmetic product; mutant.
XX
OS Mus sp.
OS Homo sapiens.
OS Chimeric.
OS Synthetic.
XX
PN US2003203447-A1.
XX
PD 30-OCT-2003.
XX
PF 31-MAR-2003; 2003US-00404724.
XX
PR 29-MAR-2002; 2002US-0368530P.
XX
PA (HORW/) HORWITZ A H.
XX
PI Horwitz AH;
XX
DR WPI; 2003-875646/81.
DR N-PSDB; ADL23149.
XX
PT Producing recombinant polypeptide, useful for treating or diagnosing
PT comprises culturing cells transformed or transfected with a vector
PT comprising multiple copies of a transcription unit separated by a
PT selective marker gene.
XX
PS Example 6; SEQ ID NO 23; 133pp; English.
XX
CC The invention relates to producing a recombinant polypeptide comprising
CC culturing cells, which have been transformed or transfected with a
CC vector, or its segment comprising multiple copies of a transcription unit
CC separated by at least one selective marker gene, where the transcription
CC unit encodes a polypeptide under selective conditions. Also included are
CC a vector or segment comprising multiple copies of a transcription unit
CC separated by at least one selective marker gene where the transcription
CC unit encodes a polypeptide, a host cell comprising an expression vector
CC or segment and a stable cell line comprising an expression vector or
CC segment. Each transcription unit is under the control of its own promoter
CC and 3' untranslated region, where the promoter is an SV40, HSV, bovine
CC growth hormone, thymidine kinase, MPSV, mouse beta globin, human EF1, MSV
CC -LTR, RSV, MMTV-LTR, CMV, MLV, Chinese hamster elongation factor or mouse
CC Abelson LTR promoter. The expression vector further comprises multiple
CC enhancers. The transcription unit also encodes two different subunits of
CC a multimeric protein, an immunoglobulin light and heavy chain

```
CC   polypeptides or at least the variable regions of the immunoglobulin light
CC   and heavy chain polypeptides. It further encodes a BPI protein
CC   (bactericidal/permeability-increasing protein) product. The protein
CC   product BPI protein fragment, BPI analogue, BPI variant or BPI-derived
CC   peptide. The transcription unit encodes an rBPI21 and is under the
CC   control of an hCMV promoter and mouse light chain 3' untranslated region,
CC   where the vector further comprises 0, 1 or 2 copies of a human heavy
CC   chain enhancer and either a gpt or neo gene. Other genes suitable for
CC   expression using the method of the invention are Ep-CAM and CAB2.1 (both
CC   not defined). The immunoglobulin may be the ING-1 chimaeric mouse/human
CC   antibody (or humanised versions or proline substitution mutants) or an
CC   anti-CD18 antibody. The method is useful for producing recombinant
CC   polypeptide. Recombinant polypeptide compositions are useful in
CC   therapies, in diagnostic procedures or as tools in preventive medicine.
CC   Recombinant polypeptides are also found in a wide array of both health
CC   and cosmetic products, used to increase the quality of life. Complex
CC   polypeptide products are also routinely used in research laboratories
CC   both as end products of analyses and as agents in assays for the study or
CC   preparation of other molecules. Advantages of the present invention
CC   includes increased recombinant polypeptide production, increased
CC   production efficiency, greater control and/or regulation over the
CC   qualities of the polypeptide expressed, increased stability of cell
CC   lines, and/or decreased costs for materials, reagents and/or other
CC   resources. The present sequence represents a mutated (humanised or
CC   proline mutant) light or heavy chain from a antibody gene suitable for
CC   inclusion in the transcription unit of the invention.
XX
SQ   Sequence 465 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 465;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 173
AAR22759
ID   AAR22759 standard; protein; 467 AA.
XX
AC   AAR22759;
XX
DT   25-MAR-2003  (revised)
DT   20-OCT-1992  (first entry)
XX
DE   Reshaped CD4 antibody heavy chain CD4VHNEW-Ser30.
XX
KW   Antigen; CDR; complementarity determining region; graft rejection;
KW   autoimmune diseases; rheumatoid arthritis; allergy.
XX
OS   Rattus rattus.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /note= "signal peptide"
FT   Peptide         20. .467
FT                   /note= "mature peptide"
FT   Region          50. .54
FT                   /note= "Complementarity determining region 1"
FT   Region          69. .85
FT                   /note= "Complementarity determining region 2"
FT   Region          118. .126
FT                   /note= "Complementarity determining region 3"
XX
PN   WO9205274-A.
XX
PD   02-APR-1992.
XX
PF   16-SEP-1991;   91WO-GB001578.
XX
PR   17-SEP-1990;   90GB-00020282.
XX
PA   (GORM/) GORMAN S D.
XX
PI   Gorman SD,  Clark MR,  Cobbold SP,  Waldmann H;
XX
DR   WPI; 1992-132139/16.
DR   N-PSDB; AAQ23581.
XX
PT   Humanisation of antibodies binding to human CD4 antigen - by mutation of
PT   framework-encoding regions of DNA encoding variable domain of rat or
PT   mouse antibody chain.
XX
PS   Disclosure; Fig 7; 74pp; English.
XX
CC   The sequence is that of the reshaped CD4 antibody heavy chain CD4VHNEW-
CC   Ser30. Reshaped CD4 antibody can be used to induce tolerance against an
CC   antigen. It can also be used to alleviate autoimmune diseases such as
CC   rheumatoid arthritis, and to prevent graft rejection. Tolerance to a
CC   graft, e.g. an organ graft or a bone marrow transplantation can also be
CC   useful to alleviate allergies. Tolerance to allergens could also be
CC   achieved. See also AAR22753-R22763. (Updated on 25-MAR-2003 to correct PI
CC   field.)
XX
SQ   Sequence 467 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 467;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 174
AAR22758
ID   AAR22758 standard; protein; 467 AA.
XX
AC   AAR22758;
XX
DT   25-MAR-2003  (revised)
DT   20-OCT-1992  (first entry)
XX
DE   Reshaped CD4 antibody heavy chain CD4VHNEW-Thr30.
XX
KW   Antigen; CDR; complementarity determining region; graft rejection;
KW   autoimmune diseases; rheumatoid arthritis; allergy.
XX
OS   Rattus rattus.
```

```
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /note= "signal peptide"
FT   Peptide         20. .467
FT                   /note= "mature peptide"
FT   Region          50. .54
FT                   /note= "Complementarity determining region 1"
FT   Region          69. .85
FT                   /note= "Complementarity determining region 2"
FT   Region          118. .126
FT                   /note= "Complementarity determining region 3"
XX
PN   WO9205274-A.
XX
PD   02-APR-1992.
XX
PF   16-SEP-1991;   91WO-GB001578.
XX
PR   17-SEP-1990;   90GB-00020282.
XX
PA   (GORM/) GORMAN S D.
XX
PI   Gorman SD,  Clark MR,  Cobbold SP,  Waldmann H;
XX
DR   WPI; 1992-132139/16.
DR   N-PSDB; AAQ23571.
XX
PT   Humanisation of antibodies binding to human CD4 antigen - by mutation of
PT   framework-encoding regions of DNA encoding variable domain of rat or
PT   mouse antibody chain.
XX
PS   Disclosure; Fig 6; 74pp; English.
XX
CC   The sequence is that of the reshaped CD4 antibody heavy chain CD4VHNEW-
CC   Thr30. Reshaped CD4 antibody can be used to induce tolerance against an
CC   antigen. It can also be used to alleviate autoimmune diseases such as
CC   rheumatoid arthritis, and to prevent graft rejection. Tolerance to a
CC   graft, e.g. an organ graft or a bone marrow transplantation can also be
CC   useful to alleviate allergies. Tolerance to allergens could also be
CC   achieved. See also AAR22753-R22763. (Updated on 25-MAR-2003 to correct PI
CC   field.)
XX
SQ   Sequence 467 AA;

  Query Match            100.0%;  Score 1263;  DB 2;  Length 467;
  Best Local Similarity  100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 175
ADM05608
ID   ADM05608 standard; protein; 467 AA.
XX
AC   ADM05608;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human protein of the invention SEQ ID NO:4293.
XX
KW   human; gene therapy; diagnostic marker; pharmaceutical.
XX
OS   Homo sapiens.
XX
PN   EP1347046-A1.
XX
PD   24-SEP-2003.
XX
PF   12-APR-2002; 2002EP-00008400.
XX
PR   22-MAR-2002; 2002JP-00137785.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Sugiyama T,  Otsuki T,  Wakamatsu A,  Sato H,  Ishii S;
PI   Yamamoto J,  Isono Y,  Hio Y,  Otsuka K,  Nagai K,  Irie R,  Tamechika I;
PI   Seki N,  Yoshikawa T,  Otsuka M,  Nagahari K,  Masuho Y;
XX
DR   WPI; 2003-723558/69.
DR   N-PSDB; ADM03165.
XX
PT   New polynucleotides and polypeptides are useful in gene therapy, for
PT   developing a diagnostic marker or medicines for regulating their
PT   expression and activity, or as a target of gene therapy.
XX
PS   Claim 1; SEQ ID NO 4293; 305pp; English.
XX
CC   The invention relates to a novel human polynucleotide and the encoded
CC   polypeptide. A polynucleotide of the invention may have a use in gene
CC   therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC   as a primer for synthesizing the polynucleotide or as a probe for
CC   detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are
CC   useful in gene therapy, for developing a diagnostic marker or medicines
CC   for regulating their expression and activity, or as a target of gene
CC   therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
CC   are useful as pharmaceutical agents. The present sequence represents a
CC   protein sequence of the invention.
XX
SQ   Sequence 467 AA;

  Query Match            100.0%;  Score 1263;  DB 7;  Length 467;
  Best Local Similarity  100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 176
ADM41567
ID   ADM41567 standard; protein; 467 AA.
XX
AC   ADM41567;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Anti-interleukin-1 receptor type 1 antibody heavy chain.
```

XX
KW Human; monoclonal antibody; antibody; interleukin-1; receptor;
KW antiasthmatic; antiinflammatory; dermatological; antiallergic;
KW protozoacide; antirheumatic; antiarthritic; osteopathic; vasotropic;
KW analgesic; antidiabetic; nephrotropic; antianaemic; nootropic;
KW anticonvulsant; dermatological; antigout; antiparkinsonian; antidiabetic;
KW cytostatic.
XX
OS Homo sapiens.
XX
PN WO2004022718-A2.
XX
PD 18-MAR-2004.
XX
PF 05-SEP-2003; 2003WO-US027978.
XX
PR 06-SEP-2002; 2002US-0408719P.
XX
PA (AMGE-) AMGEN INC.
XX
PI Varnum B, Vezina C, Witte A, Qian X, Martin F, Huang H;
PI Elliott G;
XX
DR WPI; 2004-248462/23.
DR N-PSDB; ADM41566.
XX
PT Isolated human antibody that specifically binds interleukin-1 receptor
PT type 1 (IL-1R1) useful for treating IL-1 mediated diseases such as
PT rheumatoid arthritis, osteoarthritis and inflammatory conditions.
XX
PS Claim 3; SEQ ID NO 32; 179pp; English.
XX
CC The present sequence is that of a human anti-interleukin-1 receptor type
CC 1 (IL-1R1) monoclonal antibody (MAb) heavy chain. The invention provides
CC antibodies that comprise this sequence. Human MAbs to IL-1R1 were
CC prepared using the HCo7 strain of transgenic mice, which expresses human
CC antibody genes. These mice were immunised with purified recombinant IL-
CC 1R1, and splenocytes from immunised mice were fused to a mouse myeloma
CC cell line to generate hybridomas. Hybridomas which secreted a MAb that
CC bound with high avidity to IL-1R1 were selected. The MAbs inhibit IL-1
CC signalling by competing with IL-1beta and IL-1alpha binding to IL-1R.
CC These MAbs, as well as single chain antibodies single chain Fv
CC antibodies, Fab antibodies, Fab' antibodies and (Fab')2 antibodies
CC derived from them, are used in methods of treating IL-1 mediated diseases
CC or for detecting the amount of IL-1R1 in a sample. IL-1 mediated diseases
CC include acute pancreatitis, amyotrophic lateral sclerosis, Alzheimer's
CC disease, cachexia, anorexia, asthma, atherosclerosis, autoimmune
CC vasculitis, chronic fatigue syndrome, Clostridium associated illnesses,
CC coronary conditions, cancer including leukaemia and tumour metastasis,
CC diabetes, endometriosis, fever, fibromyalgia, glomerulonephritis, graft
CC versus host disease, osteoarthritis, rheumatoid arthritis, inflammatory
CC eye disease, ischaemia, Kawasaki's disease, learning impairment, lung
CC diseases, multiple sclerosis, myopathy, osteoporosis, pain, Parkinson's
CC disease, periodontal disease, pre-term labour, psoriasis, reperfusion
CC injury, septic shock, side effects of radiation therapy, temporal
CC mandibular joint disease, sleep disturbance, uveitis, or an inflammatory
CC condition resulting from strain, sprain, cartilage damage, trauma,
CC orthopaedic surgery, infection or other disease processes.
XX
SQ Sequence 467 AA;

Query Match 100.0%; Score 1263; DB 8; Length 467;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467

RESULT 177
AAE27928
ID AAE27928 standard; protein; 468 AA.
XX
AC AAE27928;
XX
DT 27-DEC-2002 (first entry)
XX
DE Human C5E10 antibody heavy chain protein.
XX
KW Human; CC49 antibody; C2B8 antibody; tumour associated antigen; TAG-72;
KW neoplasm; neoplastic disorder; haematologic neoplasm; colon cancer;
KW non-Hodgkin's lymphoma; haematologic malignancy; tumour.
XX
OS Homo sapiens.
XX
PN WO200260955-A2.
XX
PD 08-AUG-2002.
XX
PF 29-JAN-2002; 2002WO-US002373.
XX
PR 29-JAN-2001; 2001US-0264318P.
PR 16-NOV-2001; 2001US-0331481P.
XX
PA (IDEC-) IDEC PHARM CORP.
XX
PI Braslawsky GR, Hanna N, Chinn P;
XX
DR WPI; 2002-698547/75.
DR N-PSDB; AAD45757.
XX
PT Novel domain deleted CC49 antibody reactive with tumor associated antigen
PT -72, or C2B8 antibody reactive with CD20, useful for treating
PT myelosuppressed patient suffering from a neoplastic disorder.
XX
PS Example 3; Fig 6A; 74pp; English.
XX
CC The present invention relates to domain deleted CC49 or C2B8 antibodies.
CC Domain deleted CC49 antibodies comprise a heavy chain human CC49 domain
CC deleted sequence in which CH2 domain has been deleted and are reactive
CC with tumour associated antigen (TAG)-72. The C2B8 antibodies are reactive
CC with CD20 and comprise a heavy chain having a sequence of a derived
CC domain deleted C2B8 construct where the CH2 domain has been deleted.
CC Sequences of the invention are useful for imaging a neoplasm. They are
CC also useful for treating myelosuppressed patients suffering from
CC neoplastic disorder such as haematologic neoplasm, preferably non-
CC Hodgkin's lymphoma. Antibodies of the invention are also used to treat
CC neoplastic disorder, colon cancer and haematologic malignancy. They are
CC useful for reducing tumour size, inhibiting tumour growth and/or
CC prolonging the survival time of tumour-bearing animals and for treating
CC tumours. The present sequence is human C5E10 heavy chain protein. This
CC sequence is used in the exemplification of the invention
XX
SQ Sequence 468 AA;

Query Match 100.0%; Score 1263; DB 5; Length 468;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 237 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 296

```
Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        297 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 356

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        357 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 416

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        417 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 468
```

RESULT 178
ABB82837
ID ABB82837 standard; protein; 468 AA.
XX
AC ABB82837;
XX
DT 31-MAR-2003 (first entry)
XX
DE Antibody C5E10 heavy chain.
XX
KW C5E10; antibody; cytostatic; antiallergic; antianemic; antiasthmatic;
KW vsotropic; immunomodulator; protozoacide; antidiabetic; nephrotropic;
KW thyromimetic; hepatotropic; haemostatic; antileprotic; antibacterial;
KW neuroprotective; antipsoriatic; antirheumatic; antiarthritic; antiulcer;
KW dermatological; immunosuppressive; antiinflammatory.
XX
OS Homo sapiens.
XX
PN WO200296948-A2.
XX
PD 05-DEC-2002.
XX
PF 29-JAN-2002; 2002WO-US002374.
XX
PR 29-JAN-2001; 2001US-0264318P.
PR 16-NOV-2001; 2001US-0331481P.
PR 21-DEC-2001; 2001US-0341858P.
XX
PA (IDEC-) IDEC PHARM CORP.
XX
PI Braslawsky GR, Hanna N, Chinn P, Hariharan K;
XX
DR WPI; 2003-140446/13.
DR N-PSDB; ABZ24021.
XX
PT Novel dimeric antibody useful for treating immune disorder and neoplastic
PT disorder, has several non-covalently associated monomeric subunits.
XX
PS Example 3; Fig 6; 78pp; English.
XX
CC The invention relates to a dimeric antibody (I) comprising several
CC monomeric subunits, where the monomeric subunits are non-covalently
CC associated. (I) is useful for treating a disorder, especially immune
CC disorder, and neoplastic disorder such as relapsed Hodgkin's disease,
CC resistant Hodgkin's disease high grade, low grade and intermediate grade
CC non-Hodgkin's lymphomas, B cell chronic lymphocytic leukemia (B-CLL),
CC lymphoplasmacytoid lymphoma (LPL), mantle cell lymphoma (MCL), follicular
CC lymphoma (FL), diffuse large cell lymphoma (DLCL), Burkitt's lymphoma,
CC AIDS-related lymphomas, monocytic B cell lymphoma, angioimmunoblastic
CC lymphoadenopathy, small lymphocytic, follicular, diffuse large cell,
CC diffuse small cleaved cell, large cell immunoblastic lymphoblastoma,
CC small, non-cleaved, Burkitt's and non-Burkitt's, follicular, mixed small
CC cleaved and large cell lymphomas, in a mammal (see ABZ24017 for a
CC detailed description of the various uses of (I)). The present sequence
CC represents the antibody C5E10 heavy chain
XX
SQ Sequence 468 AA;

```
  Query Match           100.0%;  Score 1263;  DB 6;  Length 468;
  Best Local Similarity  100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        237 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 296

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        297 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 356

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        357 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 416

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        417 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 468
```

RESULT 179
ABP58275
ID ABP58275 standard; protein; 468 AA.
XX
AC ABP58275;
XX
DT 23-OCT-2003 (revised)
DT 31-MAR-2003 (first entry)
XX
DE Humanised 3D6 antibody heavy chain.
XX
KW Monoclonal antibody; 3D6; complementarity determining region; CDR; mouse;
KW human; humanised antibody; antibody; Alzheimer's disease;
KW Down's syndrome; cerebral amyloid angiopathy; neuroprotective; nootropic.
XX
OS Mus sp.
OS Homo sapiens.
OS Chimeric.
XX
FH Key   Location/Qualifiers
FT Peptide   1. .19
FT   /label= Signal_peptide
FT Protein   20. .468
FT   /label= Mature_peptide
FT   /note= "the mature heavy chain is claimed in Claim 5"
FT Region   20. .138
FT   /note= "heavy chain variable region, claimed in Claim 4"
FT Region   50. .54
FT   /note= "CDR1"
FT Region   69. .85
FT   /note= "CDR2"
FT Region   118. .127
FT   /note= "CDR3"
XX
PN WO200288306-A2.
XX
PD 07-NOV-2002.
XX
PF 26-APR-2002; 2002WO-US011853.
XX
PR 30-APR-2001; 2001US-0287539P.
XX
PA (ELIL) LILLY & CO ELI.
XX
PI Tsurushita N, Vasquez M;
XX
DR WPI; 2003-183835/18.
DR N-PSDB; ABZ24633, ABZ24635.
XX
PT New humanized forms of mouse 3D6 antibodies, useful for treating Down's
PT syndrome, (pre-)clinical Alzheimer's disease or (pre-)clinical cerebral
PT amyloid angiopathy, or for inhibiting formation of or reducing Abeta
PT plaque in the brain.
XX

PS Disclosure; Page 13-14; 54pp; English.
XX
CC The present sequence is that of a preferred heavy chain of a humanised
CC antibody of the present invention. In the variable region of this
CC sequence, the complementarity determining regions (CDRs) originate from
CC murine monoclonal antibody 3D6 and the framework region from human
CC germline VH segment DP-45 and J segment JH4. Novel humanised antibodies
CC of the invention have CDRs from 3D6 and human framework sequences. These
CC humanised antibodies have binding affinities (affinity and epitope
CC location) approximately the same as those of the mouse 3D6 antibody. The
CC invention includes antibodies, single chain antibodies, and their
CC fragments, as well as nucleotide sequences, vectors, transformed host
CC cells, and methods of using the humanised antibody to treat, prevent,
CC alleviate, reverse or otherwise ameliorate symptoms and/or pathology
CC associated with Down's syndrome, (pre-)clinical Alzheimer's disease or
CC (pre-)clinical cerebral amyloid angiopathy, and to inhibit formation or
CC reduce Abeta plaque in the brain. (Updated on 23-OCT-2003 to standardise
CC OS field)
XX
SQ Sequence 468 AA;

Query Match 100.0%; Score 1263; DB 6; Length 468;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 237 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 296

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 297 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 356

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 357 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 416

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 417 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 468

RESULT 180
ADR46819
ID ADR46819 standard; protein; 468 AA.
XX
AC ADR46819;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human antibody B11 heavy chain variable region protein SEQ ID NO:2.
XX
KW molecular conjugate; monoclonal antibody; human antigen presenting cell;
KW antigen presenting cell; APC; human; beta human chorionic gonadotropin;
KW betahCG; beta chorionic gonadotropin; antibody;
KW T cell-mediated immune response; immunisation; cytostatic; antimicrobial;
KW immunosuppressive; anti-HIV; hepatotropic; virucide; antimalarial;
KW CD8 agonist; vaccine; autoimmune disorder; cancer; infectious disease;
KW melanoma; fibrosarcoma; leukaemia; HIV; hepatitis; malaria; herpes;
KW antibody B11; heavy chain variable region.
XX
OS Homo sapiens.
XX
PN WO2004074432-A2.
XX
PD 02-SEP-2004.
XX
PF 30-JAN-2004; 2004WO-US002725.
XX
PR 31-JAN-2003; 2003US-0443979P.
XX
PA (MEDA-) MEDAREX INC.
XX
PI Keler T, Endres M, He L, Ramakrishna V;
XX
DR WPI; 2004-635555/61.
DR N-PSDB; ADR46818.
XX
PT New molecular conjugate having a monoclonal antibody that binds to human
PT APCs linked to a beta human chorionic gonadotropin, useful for inducing a
PT cytotoxic T cell response in cancers and infectious diseases.
XX
PS Claim 13; SEQ ID NO 2; 82pp; English.
XX
CC The present invention describes a molecular conjugate comprising a
CC monoclonal antibody that binds to human antigen presenting cells (APCs)
CC linked to beta human chorionic gonadotropin (betahCG), where the antibody
CC comprises a heavy and/or light chain variable region derived from a human
CC VH5-51 or Vk-L15 germline sequence with the 98 or 95 amino acid sequences
CC of SEQ ID NO:30 or 32 (ADR46847, or ADR46849), respectively. Also
CC described: (1) a molecular conjugate comprising a human antibody heavy
CC chain and a human antibody light chain, where either or both chains are
CC linked to betahCG; (2) a molecular conjugate comprising a human single
CC chain antibody that binds to human APCs linked to betahCG, where the
CC conjugate comprises the 411 amino acid sequence of SEQ ID NO:12
CC (ADR46829); (3) a composition comprising any of the molecular conjugates
CC as described above, and a carrier, optionally in combination with an
CC adjuvant; (4) inducing or enhancing a T cell-mediated immune response,
CC against betahCG, comprising contacting any of the molecular conjugates
CC described above with APCs such that the antigen is processed and
CC presented to T cells in a manner which induces or enhances a T cell-
CC mediated response against the antigen; (5) immunising a subject
CC comprising administering any of the molecular conjugates described above,
CC optionally in combination with an adjuvant, a cytokine which stimulates
CC proliferation of dendritic cells and/or an immunostimulatory agent; and
CC (6) inducing or enhancing a cytotoxic T cell response against an antigen,
CC comprising forming a conjugate of the antigen and a monoclonal antibody
CC which binds to APCs, and contacting the conjugate either in vivo or ex
CC vivo with APCs such that the antigen is internalised, processed and
CC presented to T cells in a manner which induces or enhances a cytotoxic T
CC cell response against the antigen. The molecular conjugate has
CC cytostatic, antimicrobial, immunosuppressive, anti-HIV, hepatotropic,
CC virucide and antimalarial activities, and can be used as a CD8 agonist,
CC and in vaccines. The methods and compositions of the present invention
CC are useful for inducing a cytotoxic T cell response, and in particular
CC for treating autoimmune disorders, cancers and infectious diseases by
CC eliciting a potent antigen-specific cytotoxic T lymphocyte response,
CC including melanoma, fibrosarcoma, leukaemia, HIV, hepatitis, malaria and
CC herpes. The present sequence represents a human antibody B11 heavy chain
CC variable region, which is used in the exemplification of the present
CC invention.
XX
SQ Sequence 468 AA;

Query Match 100.0%; Score 1263; DB 8; Length 468;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465

RESULT 181

ADM41555
ID ADM41555 standard; protein; 469 AA.
XX
AC ADM41555;
XX
DT 03-JUN-2004 (first entry)
XX
DE Anti-interleukin-1 receptor type 1 antibody heavy chain.
XX
KW Human; monoclonal antibody; antibody; interleukin-1; receptor;
KW antiasthmatic; antiinflammatory; dermatological; antiallergic;
KW protozoacide; antirheumatic; antiarthritic; osteopathic; vasotropic;
KW analgesic; antidiabetic; nephrotropic; antianaemic; nootropic;
KW anticonvulsant; dermatological; antigout; antiparkinsonian; antidiabetic;
KW cytostatic.
XX
OS Homo sapiens.
XX
PN WO2004022718-A2.
XX
PD 18-MAR-2004.
XX
PF 05-SEP-2003; 2003WO-US027978.
XX
PR 06-SEP-2002; 2002US-0408719P.
XX
PA (AMGE-) AMGEN INC.
XX
PI Varnum B, Vezina C, Witte A, Qian X, Martin F, Huang H;
PI Elliott G;
XX
DR WPI; 2004-248462/23.
DR N-PSDB; ADM41554.
XX
PT Isolated human antibody that specifically binds interleukin-1 receptor
PT type 1 (IL-1R1) useful for treating IL-1 mediated diseases such as
PT rheumatoid arthritis, osteoarthritis and inflammatory conditions.
XX
PS Claim 3; SEQ ID NO 20; 179pp; English.
XX
CC The present sequence is that of a human anti-interleukin-1 receptor type
CC 1 (IL-1R1) monoclonal antibody (MAb) heavy chain. The invention provides
CC antibodies that comprise this sequence. Human MAbs to IL-1R1 were
CC prepared using the HCo7 strain of transgenic mice, which expresses human
CC antibody genes. These mice were immunised with purified recombinant IL-
CC 1R1, and splenocytes from immunised mice were fused to a mouse myeloma
CC cell line to generate hybridomas. Hybridomas which secreted a MAb that
CC bound with high avidity to IL-1R1 were selected. The MAbs inhibit IL-1
CC signalling by competing with IL-1beta and IL-1alpha binding to IL-1R.
CC These MAbs, as well as single chain antibodies single chain Fv
CC antibodies, Fab antibodies, Fab' antibodies and (Fab')2 antibodies
CC derived from them, are used in methods of treating IL-1 mediated diseases
CC or for detecting the amount of IL-1R1 in a sample. IL-1 mediated diseases
CC include acute pancreatitis, amyotrophic lateral sclerosis, Alzheimer's
CC disease, cachexia, anorexia, asthma, atherosclerosis, autoimmune
CC vasculitis, chronic fatigue syndrome, Clostridium associated illnesses,
CC coronary conditions, cancer including leukaemia and tumour metastasis,
CC diabetes, endometriosis, fever, fibromyalgia, glomerulonephritis, graft
CC versus host disease, osteoarthritis, rheumatoid arthritis, inflammatory
CC eye disease, ischaemia, Kawasaki's disease, learning impairment, lung
CC diseases, multiple sclerosis, myopathy, osteoporosis, pain, Parkinson's
CC disease, periodontal disease, pre-term labour, psoriasis, reperfusion
CC injury, septic shock, side effects of radiation therapy, temporal
CC mandibular joint disease, sleep disturbance, uveitis, or an inflammatory
CC condition resulting from strain, sprain, cartilage damage, trauma,
CC orthopaedic surgery, infection or other disease processes.
XX
SQ Sequence 469 AA;

Query Match 100.0%; Score 1263; DB 8; Length 469;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        238 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 297

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        298 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 357

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        358 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 417

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        418 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 469
```

RESULT 182
ADM41561
ID ADM41561 standard; protein; 469 AA.
XX
AC ADM41561;
XX
DT 03-JUN-2004 (first entry)
XX
DE Anti-interleukin-1 receptor type 1 antibody heavy chain.
XX
KW Human; monoclonal antibody; antibody; interleukin-1; receptor;
KW antiasthmatic; antiinflammatory; dermatological; antiallergic;
KW protozoacide; antirheumatic; antiarthritic; osteopathic; vasotropic;
KW analgesic; antidiabetic; nephrotropic; antianaemic; nootropic;
KW anticonvulsant; dermatological; antigout; antiparkinsonian; antidiabetic;
KW cytostatic.
XX
OS Homo sapiens.
XX
PN WO2004022718-A2.
XX
PD 18-MAR-2004.
XX
PF 05-SEP-2003; 2003WO-US027978.
XX
PR 06-SEP-2002; 2002US-0408719P.
XX
PA (AMGE-) AMGEN INC.
XX
PI Varnum B, Vezina C, Witte A, Qian X, Martin F, Huang H;
PI Elliott G;
XX
DR WPI; 2004-248462/23.
DR N-PSDB; ADM41560.
XX
PT Isolated human antibody that specifically binds interleukin-1 receptor
PT type 1 (IL-1R1) useful for treating IL-1 mediated diseases such as
PT rheumatoid arthritis, osteoarthritis and inflammatory conditions.
XX
PS Claim 3; SEQ ID NO 26; 179pp; English.
XX
CC The present sequence is that of a human anti-interleukin-1 receptor type
CC 1 (IL-1R1) monoclonal antibody (MAb) heavy chain. The invention provides
CC antibodies that comprise this sequence. Human MAbs to IL-1R1 were
CC prepared using the HCo7 strain of transgenic mice, which expresses human
CC antibody genes. These mice were immunised with purified recombinant IL-
CC 1R1, and splenocytes from immunised mice were fused to a mouse myeloma
CC cell line to generate hybridomas. Hybridomas which secreted a MAb that
CC bound with high avidity to IL-1R1 were selected. The MAbs inhibit IL-1
CC signalling by competing with IL-1beta and IL-1alpha binding to IL-1R.
CC These MAbs, as well as single chain antibodies single chain Fv
CC antibodies, Fab antibodies, Fab' antibodies and (Fab')2 antibodies
CC derived from them, are used in methods of treating IL-1 mediated diseases
CC or for detecting the amount of IL-1R1 in a sample. IL-1 mediated diseases
CC include acute pancreatitis, amyotrophic lateral sclerosis, Alzheimer's
CC disease, cachexia, anorexia, asthma, atherosclerosis, autoimmune

```
CC   vasculitis, chronic fatigue syndrome, Clostridium associated illnesses,
CC   coronary conditions, cancer including leukaemia and tumour metastasis,
CC   diabetes, endometriosis, fever, fibromyalgia, glomerulonephritis, graft
CC   versus host disease, osteoarthritis, rheumatoid arthritis, inflammatory
CC   eye disease, ischaemia, Kawasaki's disease, learning impairment, lung
CC   diseases, multiple sclerosis, myopathy, osteoporosis, pain, Parkinson's
CC   disease, periodontal disease, pre-term labour, psoriasis, reperfusion
CC   injury, septic shock, side effects of radiation therapy, temporal
CC   mandibular joint disease, sleep disturbance, uveitis, or an inflammatory
CC   condition resulting from strain, sprain, cartilage damage, trauma,
CC   orthopaedic surgery, infection or other disease processes.
XX
SQ   Sequence 469 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 469;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        238 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 297

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        298 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 357

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        358 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 417

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        418 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 469


RESULT 183
AAR22757
ID   AAR22757 standard; protein; 470 AA.
XX
AC   AAR22757;
XX
DT   25-MAR-2003  (revised)
DT   20-OCT-1992  (first entry)
XX
DE   Reshaped CAMPATH-1 antibody heavy chain.
XX
KW   Antigen; CDR; complementarity determining region; graft rejection;
KW   autoimmune diseases; rheumatoid arthritis; allergy.
XX
OS   Rattus rattus.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /note= "signal peptide"
FT   Peptide         20. .470
FT                   /note= "mature peptide"
FT   Region          50. .54
FT                   /note= "Complementarity determining region 1"
FT   Region          69. .87
FT                   /note= "Complementarity determining region 2"
FT   Region          101. .110
FT                   /note= "Complementarity determining region 3"
XX
PN   WO9205274-A.
XX
PD   02-APR-1992.
XX
PF   16-SEP-1991;   91WO-GB001578.
XX
PR   17-SEP-1990;   90GB-00020282.
XX
PA   (GORM/) GORMAN S D.
XX
PI   Gorman SD,  Clark MR,  Cobbold SP,  Waldmann H;
XX
DR   WPI; 1992-132139/16.
DR   N-PSDB; AAQ23570.
XX
PT   Humanisation of antibodies binding to human CD4 antigen - by mutation of
PT   framework-encoding regions of DNA encoding variable domain of rat or
PT   mouse antibody chain.
XX
PS   Disclosure; Fig 5; 74pp; English.
XX
CC   The sequence is that of the reshaped CAMPATH-1 heavy chain antibody.
CC   Reshaped CD4 antibody can be used to induce tolerance against an antigen.
CC   It can also be used to alleviate autoimmune diseases such as rheumatoid
CC   arthritis, and to prevent graft rejection. Tolerance to a graft, e.g. an
CC   organ graft or a bone marrow transplantation can also be useful to
CC   alleviate allergies. Tolerance to allergens could also be achieved. See
CC   also AAR22754-R22763. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 470 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 184
AAU77289
ID   AAU77289 standard; protein; 470 AA.
XX
AC   AAU77289;
XX
DT   06-JUN-2002  (first entry)
XX
DE   Protein #2 in invention relating to von Willebrand factor.
XX
KW   Von Willebrand factor.
XX
OS   Unidentified.
XX
PN   KR99066382-A.
XX
PD   16-AUG-1999.
XX
PF   24-JAN-1998;   98KR-00002265.
XX
PR   24-JAN-1998;   98KR-00002265.
XX
PA   (GREC ) KOREA GREEN CROSS CORP.
XX
PI   Kim HC,  Kim JS,  Byun TH,  Lee JS,  Oh HG,  Lee JM,  Kim BJ;
XX
DR   WPI; 2000-547436/50.
DR   N-PSDB; ABK11000.
XX
PT   Method for purifying factor VIII using chimera antibody to von Willebrand
PT   factor.
```

```
XX
PS   Disclosure; Fig 2; 12pp; Korean.
XX
CC   The present invention relates to von Willebrand factor. The present
CC   sequence representing a protein of unknown function is given in the
CC   specification of the present invention
XX
SQ   Sequence 470 AA;

  Query Match             100.0%;  Score 1263;  DB 3;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 185
AAE27923
ID   AAE27923 standard; protein; 470 AA.
XX
AC   AAE27923;
XX
DT   27-DEC-2002  (first entry)
XX
DE   Human C2B8 antibody heavy chain protein.
XX
KW   Human; CC49 antibody; C2B8 antibody; tumour associated antigen; TAG-72;
KW   neoplasm; neoplastic disorder; haematologic neoplasm; colon cancer;
KW   non-Hodgkin's lymphoma; haematologic malignancy; tumour.
XX
OS   Homo sapiens.
XX
PN   WO200260955-A2.
XX
PD   08-AUG-2002.
XX
PF   29-JAN-2002; 2002WO-US002373.
XX
PR   29-JAN-2001; 2001US-0264318P.
PR   16-NOV-2001; 2001US-0331481P.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Braslawsky GR,  Hanna N,  Chinn P;
XX
DR   WPI; 2002-698547/75.
DR   N-PSDB; AAD45752.
XX
PT   Novel domain deleted CC49 antibody reactive with tumor associated antigen
PT   -72, or C2B8 antibody reactive with CD20, useful for treating
PT   myelosuppressed patient suffering from a neoplastic disorder.
XX
PS   Example 1; Fig 1A; 74pp; English.
XX
CC   The present invention relates to domain deleted CC49 or C2B8 antibodies.
CC   Domain deleted CC49 antibodies comprise a heavy chain human CC49 domain
CC   deleted sequence in which CH2 domain has been deleted and are reactive
CC   with tumour associated antigen (TAG)-72. The C2B8 antibodies are reactive
CC   with CD20 and comprise a heavy chain having a sequence of a derived
CC   domain deleted C2B8 construct where the CH2 domain has been deleted.
CC   Sequences of the invention are useful for imaging a neoplasm. They are
CC   also useful for treating myelosuppressed patients suffering from
CC   neoplastic disorder such as haematologic neoplasm, preferably non-
CC   Hodgkin's lymphoma. Antibodies of the invention are also used to treat
CC   neoplastic disorder, colon cancer and haematologic malignancy. They are
CC   useful for reducing tumour size, inhibiting tumour growth and/or
CC   prolonging the survival time of tumour-bearing animals and for treating
CC   tumours. The present sequence is human C2B8 heavy chain protein. This
CC   sequence is used in the exemplification of the invention
XX
SQ   Sequence 470 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 186
ABB82832
ID   ABB82832 standard; protein; 470 AA.
XX
AC   ABB82832;
XX
DT   31-MAR-2003  (first entry)
XX
DE   Antibody C2B8 heavy chain.
XX
KW   C2B8; antibody; cytostatic; antiallergic; antianemic; antiasthmatic;
KW   vsotropic; immunomodulator; protozoacide; antidiabetic; nephrotropic;
KW   thyromimetic; hepatotropic; haemostatic; antileprotic; antibacterial;
KW   neuroprotective; antipsoriatic; antirheumatic; antiarthritic; antiulcer;
KW   dermatological; immunosuppressive; antiinflammatory.
XX
OS   Homo sapiens.
XX
PN   WO200296948-A2.
XX
PD   05-DEC-2002.
XX
PF   29-JAN-2002; 2002WO-US002374.
XX
PR   29-JAN-2001; 2001US-0264318P.
PR   16-NOV-2001; 2001US-0331481P.
PR   21-DEC-2001; 2001US-0341858P.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Braslawsky GR,  Hanna N,  Chinn P,  Hariharan K;
XX
DR   WPI; 2003-140446/13.
DR   N-PSDB; ABZ24016.
XX
PT   Novel dimeric antibody useful for treating immune disorder and neoplastic
PT   disorder, has several non-covalently associated monomeric subunits.
XX
PS   Example 1; Fig 1A; 78pp; English.
```

```
XX
CC   The invention relates to a dimeric antibody (I) comprising several
CC   monomeric subunits, where the monomeric subunits are non-covalently
CC   associated. (I) is useful for treating a disorder, especially immune
CC   disorder, and neoplastic disorder such as relapsed Hodgkin's disease,
CC   resistant Hodgkin's disease high grade, low grade and intermediate grade
CC   non-Hodgkin's lymphomas, B cell chronic lymphocytic leukemia (B-CLL),
CC   lymphoplasmacytoid lymphoma (LPL), mantle cell lymphoma (MCL), follicular
CC   lymphoma (FL), diffuse large cell lymphoma (DLCL), Burkitt's lymphoma,
CC   AIDS-related lymphomas, monocytic B cell lymphoma, angioimmunoblastic
CC   lymphoadenopathy, small lymphocytic, follicular, diffuse large cell,
CC   diffuse small cleaved cell, large cell immunoblastic lymphoblastoma,
CC   small, non-cleaved, Burkitt's and non-Burkitt's, follicular, mixed small
CC   cleaved and large cell lymphomas, in a mammal. (I) is also useful for
CC   treating allergic rhinitis, autoimmune haemolytic anemia, allergic
CC   contact dermatitis, Addison's disease, atopic dermatitis, amyloidosis,
CC   aplastic anemia, arteritis, asthma, ataxia-telangiectasia, autoimmune
CC   oophoritis, Buerger's disease, bronchitis, candidiasis, Post-myocardial
CC   infarction syndrome, carditis, celiac sprue, Chagas's disease, Chediak-
CC   Higashi syndrome, Crohn's disease, cryoglobulinemia, diabetes mellitus,
CC   erythema multiforme, glomerulonephritis, Goodpasture's syndrome, Grave's
CC   disease, Hashimoto's thyroiditis, haemolytic disease of the newborn,
CC   hepatitis, idiopathic thrombocytopenic purpure, leprosy, Lyme disease,
CC   multiple sclerosis, myasthenia gravis, polymyositis, scleroderma,
CC   paroxysmal nocturnal haemoglobinuria, psoriasis, Raynaud's phenomenon/
CC   syndrome, rheumatoid arthritis, Sjogren's syndrome, systemic lupus
CC   erythematosus, transplant rejection, and ulcerative colitis. (I) is also
CC   useful for inducing hyper-cross-linking of membrane antigens, for killing
CC   or inhibiting selected cell populations in the treatment of diseases such
CC   as cancer and immune disorders, for treating myelosuppressed or
CC   myelocompromised patients, for inducing apoptosis in the target cell
CC   population or effectively block cell surface receptors necessary for the
CC   growth of neoplastic cells, in viral or bacterial neutralization, for
CC   diagnostic imaging of tumours, and for reducing tumour size, inhibiting
CC   tumour growth and/or prolonging the survival time of tumour-bearing
CC   animals. The present sequence represents the antibody C2B8 heavy chain
XX
SQ   Sequence 470 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 187
ADB65576
ID   ADB65576 standard; protein; 470 AA.
XX
AC   ADB65576;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human protein encoded by clone THYMU20052830.
XX
KW   Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
KW   cell regeneration; membrane protein; signal transduction-related protein;
KW   transcription-related protein; osteoporosis; neurological disease;
KW   cancer; tumour.
XX
OS   Homo sapiens.
XX
PN   EP1308459-A2.
XX
PD   07-MAY-2003.
XX
PF   28-MAR-2002; 2002EP-00007401.
XX
PR   05-NOV-2001; 2001JP-00379298.
PR   25-JAN-2002; 2002US-00350978.
XX
PA   (HELI-) HELIX RES INST.
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Sugiyama T,  Otsuki T,  Wakamatsu A,  Sato H,  Ishii S;
PI   Yamamoto J,  Isono Y,  Hio Y,  Otsuka K,  Nagai K,  Irie R,  Tamechika I;
PI   Seki N,  Yoshikawa T,  Otsuka M,  Nagahari K,  Masuho Y;
XX
DR   WPI; 2003-450961/43.
DR   N-PSDB; ADB63606.
XX
PT   New polynucleotides and polypeptides, useful for developing a diagnostic
PT   marker or medicines for regulation of their expression and activity, or
PT   as targets of gene therapy.
XX
PS   Claim 1; Page; 222pp; English.
XX
CC   The invention discloses a polynucleotide comprising a sequence selected
CC   from 1970 fully defined nucleotide sequences which encode novel
CC   polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
CC   or its partial peptide, an antibody binding to the polypeptide or peptide
CC   of the polynucleotide, immunologically assaying the polypeptide or
CC   peptide of the polynucleotide by contacting the polypeptide or peptide
CC   with the antibody of the encoded protein, and observing the binding
CC   between the two, a transformant carrying the polynucleotide in an
CC   expressible manner and an antisense polynucleotide. The oligonucleotide
CC   is useful as a primer for synthesising the polynucleotide, or as a probe
CC   for detecting the polynucleotide. The polynucleotides and encoded
CC   proteins are useful as pharmaceutical agents and many disease-related
CC   genes may be included in them, for developing a diagnostic marker or
CC   medicines for regulation of their expression and activity, or as targets
CC   of gene therapy. The genes are involved in tissue and/or cell
CC   regeneration. Membrane proteins, signal transduction-related proteins,
CC   transcription-related proteins, disease-related proteins and genes
CC   encoding them can be used as indicators for diseases (e.g. osteoporosis,
CC   neurological diseases, cancer, tumours. The cDNA may be used to regulate
CC   the activity or expression of the encoded protein to treat diseases. The
CC   sequence presented is a protein of the invention. Note: Some of the
CC   sequence data for this patent is not represented in the printed
CC   specification, but is based on sequence information supplied by the
CC   European Patent Office.
XX
SQ   Sequence 470 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 188
ADM72027
ID   ADM72027 standard; protein; 470 AA.
XX
AC   ADM72027;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Chimeric mouse-human antibody M1E07 heavy chain.
XX
KW   GPC3; glypican 3; anti-GPC3 antibody; cell disruption; anti-cancer;
KW   cytostatic; M1E07.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
PN   WO2004022739-A1.
XX
PD   18-MAR-2004.
XX
PF   04-SEP-2003; 2003WO-JP011318.
XX
PR   04-SEP-2002; 2002WO-JP008999.
XX
PA   (CHUS ) CHUGAI SEIYAKU KK.
XX
PI   Aburatani H,  Midorikawa Y,  Nakano K,  Ohizumi I,  Ito Y,  Tokita S;
XX
DR   WPI; 2004-269573/25.
DR   N-PSDB; ADM72026.
XX
PT   Antibody against the N terminus of glypican 3(GPC3) causes cell
PT   disruption and is useful as an anticancer agent.
XX
PS   Example 4; SEQ ID NO 12; 122pp; Japanese.
XX
CC   The invention relates to an antibody against the N terminus of glypican 3
CC   (GPC3). The antiboduy can be used for causing cell disruption and can be
CC   uses as an anti-cancer agent. The present sequence represents a chimeric
CC   mouse-human antibody M1E07 heavy chain.
XX
SQ   Sequence 470 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 189
ADM72031
ID   ADM72031 standard; protein; 470 AA.
XX
AC   ADM72031;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Chimeric mouse-human antibody M18D04 heavy chain.
XX
KW   GPC3; glypican 3; anti-GPC3 antibody; cell disruption; anti-cancer;
KW   cytostatic; M18D04.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
PN   WO2004022739-A1.
XX
PD   18-MAR-2004.
XX
PF   04-SEP-2003; 2003WO-JP011318.
XX
PR   04-SEP-2002; 2002WO-JP008999.
XX
PA   (CHUS ) CHUGAI SEIYAKU KK.
XX
PI   Aburatani H,  Midorikawa Y,  Nakano K,  Ohizumi I,  Ito Y,  Tokita S;
XX
DR   WPI; 2004-269573/25.
DR   N-PSDB; ADM72030.
XX
PT   Antibody against the N terminus of glypican 3(GPC3) causes cell
PT   disruption and is useful as an anticancer agent.
XX
PS   Example 4; SEQ ID NO 16; 122pp; Japanese.
XX
CC   The invention relates to an antibody against the N terminus of glypican 3
CC   (GPC3). The antiboduy can be used for causing cell disruption and can be
CC   uses as an anti-cancer agent. The present sequence represents a chimeric
CC   mouse-human antibody M18D04 heavy chain.
XX
SQ   Sequence 470 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 470;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 190
AAY45030
ID   AAY45030 standard; protein; 471 AA.
XX
AC   AAY45030;
XX
DT   31-MAY-2000  (first entry)
XX
DE   HUMAN OCR10-Fc fusion protein.
XX
KW   Human; Orphan Cytokine Receptor-10; OCR10; chromosome 16p12; treatment;
KW   screen; cytokine; cognate ligand; endocrine disorder; immune disorder;
```

```
KW   HUMAN OCR10-Fc fusion protein; crystallisable fragment; Fc.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Domain          1. .236
FT                   /label= Extracellular_domain
FT                   /note= "Corresponds to HUMAN OCR10"
XX
PN   WO200008152-A1.
XX
PD   17-FEB-2000.
XX
PF   16-JUL-1999;   99WO-US016060.
XX
PR   04-AUG-1998;   98US-00128820.
XX
PA   (REGE-) REGENERON PHARM INC.
XX
PI   Masiakowski PJ,  Morris J,  Valenzuela DM;
XX
DR   WPI; 2000-205707/18.
DR   N-PSDB; AAZ50747.
XX
PT   New HUMAN orphan cytokine receptors 10 and 10-A useful for screening for
PT   drugs e.g. receptor agonists that may mediate survival and
PT   differentiation in cells naturally expressing the receptor and for
PT   screening for cognate ligands.
XX
PS   Example 6; Page 31-33; 54pp; English.
XX
CC   The present sequence is that of HUMAN OCR10-Fc fusion protein, which is
CC   expressed as a soluble secreted protein. It comprises of extracellular
CC   domain from HUMAN OCR10 and crystallisable fragment (Fc) region of human
CC   immunoglobulin gamma-1 (IgG1). HUMAN OCR10-Fc DNA insert can be used to
CC   tranform host cells or for studying efficacy of drugs for diseases
CC   associated with HUMAN OCR10 or OCR10-A polypeptide-mediated signal
CC   transduction. HUMAN Orphan Cytokine Receptor-10 (OCR10) gene is located
CC   on chromosome 16p12. It is expressed at high levels in spleen, thymus,
CC   peripheral blood leucocytes and lymph nodes and moderately in heart and
CC   placenta. It has a role in immune system and cytokine function. It is
CC   useful in screening for cognate ligands or drugs that mediate survival
CC   and differentiation of cells expressing this receptor. Modified HUMAN
CC   OCR10 or its agonist can be used in the treatment of endocrine or immune
CC   disorders
XX
SQ   Sequence 471 AA;

  Query Match             100.0%;  Score 1263;  DB 3;  Length 471;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 419

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        420 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 471


RESULT 191
ADM05609
ID   ADM05609 standard; protein; 471 AA.
XX
AC   ADM05609;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human protein of the invention SEQ ID NO:4294.
XX
KW   human; gene therapy; diagnostic marker; pharmaceutical.
XX
OS   Homo sapiens.
XX
PN   EP1347046-A1.
XX
PD   24-SEP-2003.
XX
PF   12-APR-2002; 2002EP-00008400.
XX
PR   22-MAR-2002; 2002JP-00137785.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Sugiyama T,  Otsuki T,  Wakamatsu A,  Sato H,  Ishii S;
PI   Yamamoto J,  Isono Y,  Hio Y,  Otsuka K,  Nagai K,  Irie R,  Tamechika I;
PI   Seki N,  Yoshikawa T,  Otsuka M,  Nagahari K,  Masuho Y;
XX
DR   WPI; 2003-723558/69.
DR   N-PSDB; ADM03166.
XX
PT   New polynucleotides and polypeptides are useful in gene therapy, for
PT   developing a diagnostic marker or medicines for regulating their
PT   expression and activity, or as a target of gene therapy.
XX
PS   Claim 1; SEQ ID NO 4294; 305pp; English.
XX
CC   The invention relates to a novel human polynucleotide and the encoded
CC   polypeptide. A polynucleotide of the invention may have a use in gene
CC   therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC   as a primer for synthesizing the polynucleotide or as a probe for
CC   detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are
CC   useful in gene therapy, for developing a diagnostic marker or medicines
CC   for regulating their expression and activity, or as a target of gene
CC   therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
CC   are useful as pharmaceutical agents. The present sequence represents a
CC   protein sequence of the invention.
XX
SQ   Sequence 471 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 471;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 419

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        420 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 471


RESULT 192
ADM05600
ID   ADM05600 standard; protein; 471 AA.
XX
AC   ADM05600;
```

XX
DT 20-MAY-2004 (first entry)
XX
DE Human protein of the invention SEQ ID NO:4285.
XX
KW human; gene therapy; diagnostic marker; pharmaceutical.
XX
OS Homo sapiens.
XX
PN EP1347046-A1.
XX
PD 24-SEP-2003.
XX
PF 12-APR-2002; 2002EP-00008400.
XX
PR 22-MAR-2002; 2002JP-00137785.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
XX
DR WPI; 2003-723558/69.
DR N-PSDB; ADM03157.
XX
PT New polynucleotides and polypeptides are useful in gene therapy, for
PT developing a diagnostic marker or medicines for regulating their
PT expression and activity, or as a target of gene therapy.
XX
PS Claim 1; SEQ ID NO 4285; 305pp; English.
XX
CC The invention relates to a novel human polynucleotide and the encoded
CC polypeptide. A polynucleotide of the invention may have a use in gene
CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC as a primer for synthesizing the polynucleotide or as a probe for
CC detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are
CC useful in gene therapy, for developing a diagnostic marker or medicines
CC for regulating their expression and activity, or as a target of gene
CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
CC are useful as pharmaceutical agents. The present sequence represents a
CC protein sequence of the invention.
XX
SQ Sequence 471 AA;

Query Match 100.0%; Score 1263; DB 7; Length 471;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 240 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 300 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 419

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 420 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 471

RESULT 193
ADM72029
ID ADM72029 standard; protein; 471 AA.
XX
AC ADM72029;
XX
DT 03-JUN-2004 (first entry)
XX
DE Chimeric mouse-human antibody M19B11 heavy chain.
XX
KW GPC3; glypican 3; anti-GPC3 antibody; cell disruption; anti-cancer;
KW cytostatic; M19B11.
XX
OS Mus sp.
OS Homo sapiens.
OS Chimeric.
XX
PN WO2004022739-A1.
XX
PD 18-MAR-2004.
XX
PF 04-SEP-2003; 2003WO-JP011318.
XX
PR 04-SEP-2002; 2002WO-JP008999.
XX
PA (CHUS) CHUGAI SEIYAKU KK.
XX
PI Aburatani H, Midorikawa Y, Nakano K, Ohizumi I, Ito Y, Tokita S;
XX
DR WPI; 2004-269573/25.
DR N-PSDB; ADM72028.
XX
PT Antibody against the N terminus of glypican 3(GPC3) causes cell
PT disruption and is useful as an anticancer agent.
XX
PS Example 4; SEQ ID NO 14; 122pp; Japanese.
XX
CC The invention relates to an antibody against the N terminus of glypican 3
CC (GPC3). The antiboduy can be used for causing cell disruption and can be
CC uses as an anti-cancer agent. The present sequence represents a chimeric
CC mouse-human antibody M19B11 heavy chain.
XX
SQ Sequence 471 AA;

Query Match 100.0%; Score 1263; DB 8; Length 471;
Best Local Similarity 100.0%; Pred. No. 3.5e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 240 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 300 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 419

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 420 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 471

RESULT 194
ADR09218
ID ADR09218 standard; protein; 471 AA.
XX
AC ADR09218;
XX
DT 04-NOV-2004 (first entry)
XX
DE Human protein useful for treating neurological disease Seq 2724.
XX
KW human; oligo-capping method; diagnostic marker; gene therapy;
KW osteoporosis; neurological disease; Alzheimer's disease;
KW Parkinson's disease; dementia; short memory; cancer;
KW sense or motor function; emotional reaction; fear response; panic;
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;

```
KW   tranquiliser.
XX
OS   Homo sapiens.
XX
PN   EP1447413-A2.
XX
PD   18-AUG-2004.
XX
PF   12-FEB-2004; 2004EP-00003145.
XX
PR   14-FEB-2003; 2003JP-00102207.
PR   09-MAY-2003; 2003JP-00131452.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Yamamoto J,  Nishikawa T,  Isono Y,  Sugiyama T,  Otsuki T;
PI   Wakamatsu A,  Ishii S,  Nagai K,  Irie R;
XX
DR   WPI; 2004-583265/57.
DR   N-PSDB; ADR07262.
XX
PT   New 1995 cDNA, useful for treating osteoporosis, neurological diseases,
PT   Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS   Claim 1; SEQ ID NO 2724; 2686pp; English.
XX
CC   This invention relates to novel, isolated full length human cDNA
CC   molecules and the encoded proteins thereof. Specifically, it refers to
CC   cDNA clones obtained by an oligo-capping method, where none of these
CC   clones are identical to any known human mRNAs. The present invention
CC   describes an immunoassay to identify agonists and antagonists, as well as
CC   antibodies, antisense molecules and siRNAs that can all be used to bind
CC   to and modulate expression of the cDNA molecules. As such, these
CC   molecules are useful for diagnostic markers or therapeutic targets for
CC   the various diseases or morbid states. In particular, they are useful in
CC   gene therapy for treating osteoporosis, neurological disease, Alzheimer's
CC   disease, Parkinson's disease, dementia, short memory and various cancers,
CC   as well as for maintaining equilibrium of sense or motor function, and
CC   for treating emotional reaction, fear response and panic. Accordingly,
CC   they exhibit osteopathic, neuroprotective, nootropic, antiparkinsonian,
CC   cytostatic and tranquiliser activities. This polypeptide is a protein
CC   encoded by a full length human cDNA sequence of the invention. NOTE: This
CC   sequence is not given in the sequence listing of the specification but
CC   can be obtained on CD-ROM from the European Patent Office, Vienna Sub-
CC   office.
XX
SQ   Sequence 471 AA;

  Query Match            100.0%;  Score 1263;  DB 8;  Length 471;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 419

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        420 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 471


RESULT 195
ABP58289
ID   ABP58289 standard; protein; 472 AA.
XX
AC   ABP58289;
XX
DT   23-OCT-2003  (revised)
DT   31-MAR-2003  (first entry)
XX
DE   Humanised 10D5 antibody heavy chain.
XX
KW   Monoclonal antibody; 10D5; complementarity determining region; CDR;
KW   mouse; human; humanised antibody; antibody; Alzheimer's disease;
KW   Down's syndrome; cerebral amyloid angiopathy; neuroprotective; nootropic.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /label= Signal_peptide
FT   Peptide         20. .472
FT                   /label= Mature_protein
FT                   /note= "the mature light chain is claimed in Claim 5"
FT   Region          20. .142
FT                   /note= "light chain variable region, claimed in Claim 4"
FT   Region          50. .56
FT                   /note= "CDR1"
FT   Region          71. .86
FT                   /note= "CDR2"
FT   Region          119. .131
FT                   /note= "CDR3"
XX
PN   WO200288307-A2.
XX
PD   07-NOV-2002.
XX
PF   26-APR-2002; 2002WO-US011854.
XX
PR   30-APR-2001; 2001US-0287653P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Hinton PR,  Vasquez M;
XX
DR   WPI; 2003-183836/18.
DR   N-PSDB; ABZ24639, ABZ24641.
XX
PT   New humanized 10D5 antibody, useful for the manufacture of a medicament
PT   for treating Down's syndrome, clinical or pre-clinical Alzheimer's
PT   disease or cerebral amyloid angiopathy.
XX
PS   Disclosure; Page 13-15; 52pp; English.
XX
CC   The present sequence is the protein sequence of the heavy chain of a
CC   humanised antibody of the present invention. In the variable portion, the
CC   complementarity determining regions (CDRs) originate from murine
CC   monoclonal antibody 10D5 and the framework region originates from human
CC   germline VH segment DP-28 and J segment JH4. Novel humanised antibodies
CC   of the invention have CDRs from 10D5 and human framework sequences. These
CC   humanised antibodies have binding affinities (affinity and epitope
CC   location) approximately the same as those of the mouse 10D5 antibody. The
CC   invention includes antibodies, single chain antibodies, and their
CC   fragments, as well as nucleotide sequences, vectors, transformed host
CC   cells, and methods of using the humanised antibody to treat, prevent,
CC   alleviate, reverse or otherwise ameliorate symptoms and/or pathology
CC   associated with Down's syndrome, (pre-)clinical Alzheimer's disease or
CC   (pre-)clinical cerebral amyloid angiopathy, and to inhibit formation or
CC   reduce Abeta plaque in the brain. (Updated on 23-OCT-2003 to standardise
CC   OS field)
XX
SQ   Sequence 472 AA;

  Query Match            100.0%;  Score 1263;  DB 6;  Length 472;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 300

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 420

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 472
```

RESULT 196
ADM05388
ID ADM05388 standard; protein; 472 AA.
XX
AC ADM05388;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human protein of the invention SEQ ID NO:4073.
XX
KW human; gene therapy; diagnostic marker; pharmaceutical.
XX
OS Homo sapiens.
XX
PN EP1347046-A1.
XX
PD 24-SEP-2003.
XX
PF 12-APR-2002; 2002EP-00008400.
XX
PR 22-MAR-2002; 2002JP-00137785.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
XX
DR WPI; 2003-723558/69.
DR N-PSDB; ADM02945.
XX
PT New polynucleotides and polypeptides are useful in gene therapy, for
PT developing a diagnostic marker or medicines for regulating their
PT expression and activity, or as a target of gene therapy.
XX
PS Claim 1; SEQ ID NO 4073; 305pp; English.
XX
CC The invention relates to a novel human polynucleotide and the encoded
CC polypeptide. A polynucleotide of the invention may have a use in gene
CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC as a primer for synthesizing the polynucleotide or as a probe for
CC detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are
CC useful in gene therapy, for developing a diagnostic marker or medicines
CC for regulating their expression and activity, or as a target of gene
CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
CC are useful as pharmaceutical agents. The present sequence represents a
CC protein sequence of the invention.
XX
SQ Sequence 472 AA;

```
  Query Match             100.0%;  Score 1263;  DB 7;  Length 472;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 300

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 420

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 472
```

RESULT 197
ADQ66377
ID ADQ66377 standard; protein; 472 AA.
XX
AC ADQ66377;
XX
DT 07-OCT-2004 (first entry)
XX
DE Novel human protein sequence #1350.
XX
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW gene therapy; diagnostic marker; morbid state; osteoporosis;
KW neurological disease; Alzheimer's disease; Parkinson's disease; dementia;
KW cancer.
XX
OS Homo sapiens.
XX
PN EP1440981-A2.
XX
PD 28-JUL-2004.
XX
PF 21-JAN-2004; 2004EP-00001196.
XX
PR 21-JAN-2003; 2003JP-00102206.
PR 09-MAY-2003; 2003JP-00131392.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Nagai K, Irie R;
XX
DR WPI; 2004-535376/52.
DR N-PSDB; ADQ64189.
XX
PT Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS Claim 1; SEQ ID NO 3538; 2449pp; English.
XX
CC The invention relates to 2495 novel polynucleotides (I) and their encoded
CC polypeptides, sequences hybridizing to these nucleotides, sequences
CC encoding partial polypeptides and sequences having 70% or 90% identity to
CC the nucleotide and protein sequences. The nucleotides and polypeptides
CC are useful as diagnostic markers or therapeutic target for the diseases
CC or morbid states. They are also useful for treating osteoporosis,
CC neurological diseases, Alzheimer's diseases, Parkinson's diseases,
CC dementia and various cancers. This sequence corresponds to a protein
CC sequence of the invention.
XX
SQ Sequence 472 AA;

```
  Query Match             100.0%;  Score 1263;  DB 8;  Length 472;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 300

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 420

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 472
```

```
Db        241 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 300

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 420

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 472


RESULT 198
ADS88783
ID   ADS88783 standard; protein; 472 AA.
XX
AC   ADS88783;
XX
DT   16-DEC-2004  (first entry)
XX
DE   Sequence of the chimeric IC2 heavy chain in M13mp19 clone M609.
XX
KW   G glycoprotein; respiratory syncytial virus;
KW   respiratory syncytial virus infection; RSV; RSV infection; IC2; IgG1;
KW   chimeric.
XX
OS   Mus sp.
OS   Homo sapiens.
OS   Chimeric.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /note= "Ig leader sequence"
XX
PN   WO2004083373-A2.
XX
PD   30-SEP-2004.
XX
PF   22-MAR-2004; 2004WO-GB001239.
XX
PR   22-MAR-2003; 2003GB-00006618.
XX
PA   (UYNE-) UNIV NEWCASTLE-UPON-TYNE.
XX
PI   Toms G,  Routledge E,  Mekseepralard C;
XX
DR   WPI; 2004-691033/67.
DR   N-PSDB; ADS88782.
XX
PT   New antibody against the G glycoprotein of RSV with a variable region
PT   having a first and second domain from a VL and VH region, respectively,
PT   useful for treating respiratory syncytial virus (RSV) infections.
XX
PS   Example 4; SEQ ID NO 51; 93pp; English.
XX
CC   The specification describes an against the G glycoprotein of respiratory
CC   syncytial virus, with a variable region comprising a first domain from a
CC   variable light chain region and a second domain a variable heavy chain
CC   region. The antibodies of the invention are useful for treating and
CC   preventing the development of infections caused by the respiratory
CC   syncytial virus (RSV). The present sequence represents the chimeric IC2
CC   heavy chain carried by M13mp19 clone M609. IC2 is a murine monoclonal
CC   antibody known to bind to the RSV G glycoprotein. The above clone carries
CC   a mouse-human IgG1 chimeric antibody comprising IC2 variable regions and
CC   human kappa light chain and gamma1 heavy chain constant regions.
XX
SQ   Sequence 472 AA;

  Query Match           100.0%;  Score 1263;  DB 8;  Length 472;
  Best Local Similarity   100.0%;  Pred. No. 3.5e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 300

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 420

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 472


RESULT 199
AAG64475
ID   AAG64475 standard; protein; 473 AA.
XX
AC   AAG64475;
XX
DT   25-SEP-2001  (first entry)
XX
DE   Human type antihuman IgE antibody H chain 4.
XX
KW   Human; antihuman IgE antibody; immunoglobulin; treating;
KW   allergic disease.
XX
OS   Homo sapiens.
XX
PN   WO200151507-A1.
XX
PD   19-JUL-2001.
XX
PF   15-JAN-2001; 2001WO-JP000181.
XX
PR   14-JAN-2000; 2000JP-00007061.
XX
PA   (SNOW ) SNOW BRAND MILK PROD CO LTD.
XX
PI   Washida N,  Takahashi K,  Satake T,  Fujise N,  Tanaka H,  Kuriyama M;
XX
DR   WPI; 2001-442132/47.
DR   N-PSDB; AAH47903.
XX
PT   New peptide used for screening human anti-human immunoglobulin E
PT   monoclonal antibody useful in medical compositions for treating
PT   allergies.
XX
PS   Example 6; Page 62-63; 70pp; Japanese.
XX
CC   The present sequence is that of a human type antihuman IgE antibody H
CC   chain. The invention relates to a peptide useful in a method for
CC   screening for human type antihuman IgE monoclonal antibodies (AAH47897-
CC   AAH47904 encoding AAG64469-AAG64476) useful for preventing and/or
CC   treating allergic disease
XX
SQ   Sequence 473 AA;

  Query Match           100.0%;  Score 1263;  DB 4;  Length 473;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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```
Db        302 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 421

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 473


RESULT 200
AAG64471
ID   AAG64471 standard; protein; 473 AA.
XX
AC   AAG64471;
XX
DT   25-SEP-2001  (first entry)
XX
DE   Human type antihuman IgE antibody H chain 2.
XX
KW   Human; antihuman IgE antibody; immunoglobulin; treating;
KW   allergic disease.
XX
OS   Homo sapiens.
XX
PN   WO200151507-A1.
XX
PD   19-JUL-2001.
XX
PF   15-JAN-2001; 2001WO-JP000181.
XX
PR   14-JAN-2000; 2000JP-00007061.
XX
PA   (SNOW ) SNOW BRAND MILK PROD CO LTD.
XX
PI   Washida N,  Takahashi K,  Satake T,  Fujise N,  Tanaka H,  Kuriyama M;
XX
DR   WPI; 2001-442132/47.
DR   N-PSDB; AAH47899, AAH47900.
XX
PT   New peptide used for screening human anti-human immunoglobulin E
PT   monoclonal antibody useful in medical compositions for treating
PT   allergies.
XX
PS   Example 6; Page 56-58; 70pp; Japanese.
XX
CC   The present sequence is that of a human type antihuman IgE antibody H
CC   chain. The invention relates to a peptide useful in a method for
CC   screening for human type antihuman IgE monoclonal antibodies (AAH47897-
CC   AAH47904 encoding AAG64469-AAG64476) useful for preventing and/or
CC   treating allergic disease
XX
SQ   Sequence 473 AA;

  Query Match             100.0%;  Score 1263;  DB 4;  Length 473;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 421

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 473


RESULT 201
AAG64469
ID   AAG64469 standard; protein; 473 AA.
XX
AC   AAG64469;
XX
DT   25-SEP-2001  (first entry)
XX
DE   Human type antihuman IgE antibody H chain 1.
XX
KW   Human; antihuman IgE antibody; immunoglobulin; treating;
KW   allergic disease.
XX
OS   Homo sapiens.
XX
PN   WO200151507-A1.
XX
PD   19-JUL-2001.
XX
PF   15-JAN-2001; 2001WO-JP000181.
XX
PR   14-JAN-2000; 2000JP-00007061.
XX
PA   (SNOW ) SNOW BRAND MILK PROD CO LTD.
XX
PI   Washida N,  Takahashi K,  Satake T,  Fujise N,  Tanaka H,  Kuriyama M;
XX
DR   WPI; 2001-442132/47.
DR   N-PSDB; AAH47897.
XX
PT   New peptide used for screening human anti-human immunoglobulin E
PT   monoclonal antibody useful in medical compositions for treating
PT   allergies.
XX
PS   Example 6; Page 53-55; 70pp; Japanese.
XX
CC   The present sequence is that of a human type antihuman IgE antibody H
CC   chain. The invention relates to a peptide useful in a method for
CC   screening for human type antihuman IgE monoclonal antibodies (AAH47897-
CC   AAH47904 encoding AAG64469-AAG64476) useful for preventing and/or
CC   treating allergic disease
XX
SQ   Sequence 473 AA;

  Query Match             100.0%;  Score 1263;  DB 4;  Length 473;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 421

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 473


RESULT 202
AAG64473
ID   AAG64473 standard; protein; 473 AA.
XX
AC   AAG64473;
```

```
XX
DT   25-SEP-2001  (first entry)
XX
DE   Human type antihuman IgE antibody H chain 3.
XX
KW   Human; antihuman IgE antibody; immunoglobulin; treating;
KW   allergic disease.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 22
FT                   /note= "Encoded by CAG"
FT   Misc-difference 129. .141
FT                   /note= "Encoded by ccgtggggcc agggaacacc ggtcgccttt
FT                   gactacgtc"
XX
PN   WO200151507-A1.
XX
PD   19-JUL-2001.
XX
PF   15-JAN-2001; 2001WO-JP000181.
XX
PR   14-JAN-2000; 2000JP-00007061.
XX
PA   (SNOW ) SNOW BRAND MILK PROD CO LTD.
XX
PI   Washida N,  Takahashi K,  Satake T,  Fujise N,  Tanaka H,  Kuriyama M;
XX
DR   WPI; 2001-442132/47.
DR   N-PSDB; AAH47901.
XX
PT   New peptide used for screening human anti-human immunoglobulin E
PT   monoclonal antibody useful in medical compositions for treating
PT   allergies.
XX
PS   Example 6; Page 59-60; 70pp; Japanese.
XX
CC   The present sequence is that of a human type antihuman IgE antibody H
CC   chain. The invention relates to a peptide useful in a method for
CC   screening for human type antihuman IgE monoclonal antibodies (AAH47897-
CC   AAH47904 encoding AAG64469-AAG64476) useful for preventing and/or
CC   treating allergic disease
XX
SQ   Sequence 473 AA;

  Query Match             100.0%;  Score 1263;  DB 4;  Length 473;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 421

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db.       422 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 473


RESULT 203
ADM05599
ID   ADM05599 standard; protein; 473 AA.
XX
AC   ADM05599;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human protein of the invention SEQ ID NO:4284.
XX
KW   human; gene therapy; diagnostic marker; pharmaceutical.
XX
OS   Homo sapiens.
XX
PN   EP1347046-A1.
XX
PD   24-SEP-2003.
XX
PF   12-APR-2002; 2002EP-00008400.
XX
PR   22-MAR-2002; 2002JP-00137785.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Sugiyama T,  Otsuki T,  Wakamatsu A,  Sato H,  Ishii S;
PI   Yamamoto J,  Isono Y,  Hio Y,  Otsuka K,  Nagai K,  Irie R,  Tamechika I;
PI   Seki N,  Yoshikawa T,  Otsuka M,  Nagahari K,  Masuho Y;
XX
DR   WPI; 2003-723558/69.
DR   N-PSDB; ADM03156.
XX
PT   New polynucleotides and polypeptides are useful in gene therapy, for
PT   developing a diagnostic marker or medicines for regulating their
PT   expression and activity, or as a target of gene therapy.
XX
PS   Claim 1; SEQ ID NO 4284; 305pp; English.
XX
CC   The invention relates to a novel human polynucleotide and the encoded
CC   polypeptide. A polynucleotide of the invention may have a use in gene
CC   therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC   as a primer for synthesizing the polynucleotide or as a probe for
CC   detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are
CC   useful in gene therapy, for developing a diagnostic marker or medicines
CC   for regulating their expression and activity, or as a target of gene
CC   therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
CC   are useful as pharmaceutical agents. The present sequence represents a
CC   protein sequence of the invention.
XX
SQ   Sequence 473 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 473;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 421

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 473


RESULT 204
ADM97513
ID   ADM97513 standard; protein; 473 AA.
XX
AC   ADM97513;
XX
DT   01-JUL-2004  (first entry)
XX
```

```
DE   CD1d-IgG-B2M complex IgG1-beta2-microglobulin SEQ ID NO: 36.
XX
KW   CD1d complex; cytostatic; antiinflammatory; cancer; autoimmune disease;
KW   inflammatory disease; immunosuppressive; antimicrobial; neuroprotective;
KW   antidiabetic; antiarthritic; antirheumatic; ophthalmological;
KW   gastrointestinal; nephrotropic; dermatological; hepatotropic;
KW   beta2-microglobulin.
XX
OS   Synthetic.
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 421
FT                   /note= "encoded by TCT"
XX
PN   WO2004029206-A2.
XX
PD   08-APR-2004.
XX
PF   26-SEP-2003; 2003WO-US030238.
XX
PR   27-SEP-2002; 2002EP-00405838.
XX
PA   (VACC-) VACCINEX INC.
PA   (ROBE/) ROBERT B.
PA   (DOND/) DONDA A.
PA   (CESS/) CESSON V.
PA   (MACH/) MACH J.
XX
PI   Robert B,  Donda A,  Cesson V,  Mach J,  Zauderer M;
XX
DR   WPI; 2004-316095/29.
DR   N-PSDB; ADM97512.
XX
PT   New compound comprising CD1d complexes and an antibody specific for a
PT   cell surface marker, useful for preventing or treating tumors and
PT   autoimmune/inflammatory or infectious diseases, e.g. multiple sclerosis,
PT   diabetes or psoriasis.
XX
PS   Example 10; Page 89; 152pp; English.
XX
CC   The present invention relates to a compound comprising one or more CD1d
CC   complexes and an antibody or its fragment specific for a cell surface
CC   marker. The CD1d complexes comprise a CD1d and a beta2-microglobulin
CC   molecule, and are linked to the antibody or its fragment. The composition
CC   and methods are useful for preventing or treating tumours and
CC   autoimmune/inflammatory or infectious diseases, such as multiple
CC   sclerosis, type I diabetes, ankylosing spondylitis, acute anterior
CC   uveitis, atrophic gastritis, Goodpasture's syndrome, Grave's disease,
CC   Hashimoto's thyroiditis, myasthenia gravis, psoriasis, psoriatic
CC   arthritis, rheumatoid arthritis, systemic lupus erythematosus, systemic
CC   sclerosis, pemphigus vulgaris, pernicious anemia, primary biliary
CC   cirrhosis, ulcerative colitis or autoimmune hepatitis. The present
CC   sequence is a polypeptide used in the exemplification of the invention.
XX
SQ   Sequence 473 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 473;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 182

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 242

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 302

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 354


RESULT 205
ADM05597
ID   ADM05597 standard; protein; 474 AA.
XX
AC   ADM05597;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human protein of the invention SEQ ID NO:4282.
XX
KW   human; gene therapy; diagnostic marker; pharmaceutical.
XX
OS   Homo sapiens.
XX
PN   EP1347046-A1.
XX
PD   24-SEP-2003.
XX
PF   12-APR-2002; 2002EP-00008400.
XX
PR   22-MAR-2002; 2002JP-00137785.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Sugiyama T,  Otsuki T,  Wakamatsu A,  Sato H,  Ishii S;
PI   Yamamoto J,  Isono Y,  Hio Y,  Otsuka K,  Nagai K,  Irie R,  Tamechika I;
PI   Seki N,  Yoshikawa T,  Otsuka M,  Nagahari K,  Masuho Y;
XX
DR   WPI; 2003-723558/69.
DR   N-PSDB; ADM03154.
XX
PT   New polynucleotides and polypeptides are useful in gene therapy, for
PT   developing a diagnostic marker or medicines for regulating their
PT   expression and activity, or as a target of gene therapy.
XX
PS   Claim 1; SEQ ID NO 4282; 305pp; English.
XX
CC   The invention relates to a novel human polynucleotide and the encoded
CC   polypeptide. A polynucleotide of the invention may have a use in gene
CC   therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC   as a primer for synthesizing the polynucleotide or as a probe for
CC   detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are
CC   useful in gene therapy, for developing a diagnostic marker or medicines
CC   for regulating their expression and activity, or as a target of gene
CC   therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
CC   are useful as pharmaceutical agents. The present sequence represents a
CC   protein sequence of the invention.
XX
SQ   Sequence 474 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 474;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 302

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 362

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        363 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 422

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        423 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 474


RESULT 206
AAR20057
ID   AAR20057 standard; protein; 475 AA.
XX
AC   AAR20057;
XX
DT   25-MAR-1992  (first entry)
XX
DE   Heavy chain of 3D6 anti-HIV antibody.
XX
KW   Plasmid pUC3D6HC; human immunodeficiency virus; AIDS;
KW   complementarity determining region.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /label= signal
FT   Region          20. .49
FT                   /label= Framework_1
FT   Region          50. .54
FT                   /label= CDR-1
FT   Region          55. .68
FT                   /label= Framework_2
FT   Region          69. .85
FT                   /label= CDR_2
FT   Region          86. .117
FT                   /label= Framework_3
FT   Region          118. .134
FT                   /label= CDR_3
FT   Region          135. .145
FT                   /label= Framework_4
FT   Region          146. .475
FT                   /label= Constant_region
XX
PN   WO9118983-A.
XX
PD   12-DEC-1991.
XX
PF   29-MAY-1990;   90AT-00001178.
XX
PR   29-MAY-1990;   90AT-00001178.
XX
PA   (JUNG/) JUNGBAUER A.
XX
PI   Felgenhaue M,  Himmler G,  Kohl J,  Steindl F;
XX
DR   WPI; 1992-007468/01.
DR   N-PSDB; AAQ20066.
XX
PT   Recombinant protein which binds to complex viral antigen and HIV-1 -
PT   contains variable region of antibody derived from 3D6 cell line, used for
PT   detecting HIV-1 antigen.
XX
PS   Claim 2; Page 24; 52pp; German.
XX
CC   The variable region of the heavy chain is used in a recombinant protein
CC   with the variable region from the kappa light chain of 3D6, the two V
CC   regions being joined by a linker. The recombinant protein binds to HIV
CC   gp160. See also AAQ20067 and AAQ20068
XX
SQ   Sequence 475 AA;

  Query Match            100.0%;  Score 1263;  DB 2;  Length 475;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 207
AAR93553
ID   AAR93553 standard; protein; 475 AA.
XX
AC   AAR93553;
XX
DT   20-AUG-1996  (first entry)
XX
DE   Monoclonal antibody DNA heavy chain against 65 kD hCMV antigen.
XX
KW   Polymerase chain reaction; primer; amplify; PCR; light chain; MAb;
KW   65 kD antigen; human cytomegalovirus; hCMV; heavy chain; diagnosis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /note= "Signal peptide"
FT   Protein         20. .475
FT                   /note= "Mature heavy chain"
XX
PN   JP08038178-A.
XX
PD   13-FEB-1996.
XX
PF   20-FEB-1995;   95JP-00030742.
XX
PR   18-FEB-1994;   94JP-00021628.
XX
PA   (TANA/) TANAKA H.
PA   (NISN ) NISSHINBO IND INC.
XX
DR   WPI; 1996-154852/16.
DR   N-PSDB; AAT18059.
XX
PT   Human monoclonal antibody binds to cytomegalovirus 65 kD antigen -
PT   produced by primer amplification, used in the diagnosis of hCMV
PT   infection.
XX
PS   Claim 4; Page 16-18; 22pp; Japanese.
XX
CC   The sequences given in AAR93553-54 represent the heavy and light chains
CC   respectively of a monoclonal antibody against a 65 kD antigen of human
CC   cytomegalovirus (hCMV). The DNA's encoding these sequences were amplified
CC   using the sequences given in AAT18040-58. The monoclonal antibody may be
CC   used in the diagnosis of hCMV
XX
SQ   Sequence 475 AA;

  Query Match            100.0%;  Score 1263;  DB 2;  Length 475;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

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Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 208
AAW11641
ID   AAW11641 standard; protein; 475 AA.
XX
AC   AAW11641;
XX
DT   13-MAY-1997  (first entry)
XX
DE   Human anti-RSV monoclonal antibody RF-2 heavy chain.
XX
KW   Monoclonal antibody; MAb; RF-1; RF-2; respiratory syncytial virus; RSV;
KW   fusion protein; F-protein; vaccine; immunotherapy; therapy;
KW   Epstein Barr virus; immortalisation; recombinant antibody.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /label= Leader_peptide
FT   Region          20. .49
FT                   /label= FR1
FT                   /note= "framework region 1"
FT   Region          50. .56
FT                   /label= CDR1
FT                   /note= "complementarity determining region 1"
FT   Region          57. .70
FT                   /label= FR2
FT                   /note= "framework region 2"
FT   Region          71. .86
FT                   /label= CDR2
FT                   /note= "complementarity determining region 2"
FT   Region          87. .118
FT                   /label= FR3
FT                   /note= "framework region 3"
FT   Region          119. .134
FT                   /label= CDR3
FT                   /note= "complementarity determining region 3"
FT   Region          135. .145
FT                   /label= FR4
FT                   /note= "framework region 4"
FT   Region          146. .475
FT                   /label= Kappa
FT                   /note= "human gamma 1 constant region"
XX
PN   WO9640252-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US010070.
XX
PR   07-JUN-1995;   95US-00488376.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Brams P,  Chamat SS,  Pan L,  Walsh EE,  Heard CJ,  Newman RA;
XX
DR   WPI; 1997-099892/09.
DR   N-PSDB; AAT61279.
XX
PT   Human monoclonal antibody specific for respiratory syncytial virus fusion
PT   protein - used for the prevention and treatment of RSV infection.
XX
PS   Example 6; Fig 11b-c; 85pp; English.
XX
CC   A polypeptide (AAW11641) comprises a leader sequence, RF-2 heavy chain
CC   variable region (see also AAW11635), and human gamma 1 constant region.
CC   RF-2 is a human monoclonal antibody (hMAb) specific for the fusion
CC   protein of respiratory syncytial virus (RSV). The polypeptide can be
CC   produced in eukaryotic host (e.g. CHO) cells transfected with vector
CC   NEOSPLA incorporating a DNA construct (AAT61279) including the RF-2 VH
CC   sequence. RF-1 and RF-2 heavy and light chains (see also AAW11638-40) are
CC   similarly produced. The transfected host cells provide a constant, stable
CC   supply of anti-RSV F-protein hMAbs for use in the treatment or prevention
CC   of RSV infection
XX
SQ   Sequence 475 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 475;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 209
AAW11639
ID   AAW11639 standard; protein; 475 AA.
XX
AC   AAW11639;
XX
DT   13-MAY-1997  (first entry)
XX
DE   Human anti-RSV monoclonal antibody RF-1 heavy chain.
XX
KW   Monoclonal antibody; MAb; RF-1; RF-2; respiratory syncytial virus; RSV;
KW   fusion protein; F-protein; vaccine; immunotherapy; therapy;
KW   Epstein Barr virus; immortalisation; recombinant antibody.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /label= Leader_peptide
FT   Region          20. .49
FT                   /label= FR1
FT                   /note= "framework region 1"
FT   Region          50. .56
FT                   /label= CDR1
FT                   /note= "complementarity determining region 1"
FT   Region          57. .70
FT                   /label= FR2
FT                   /note= "framework region 2"
FT   Region          71. .86
FT                   /label= CDR2
FT                   /note= "complementarity determining region 2"
FT   Region          87. .118
FT                   /label= FR3
FT                   /note= "framework region 3"
FT   Region          119. .134
FT                   /label= CDR3
FT                   /note= "complementarity determining region 3"
```

```
FT   Region          135. .145
FT                   /label= FR4
FT                   /note= "framework region 4"
FT   Region          146. .475
FT                   /label= Kappa
FT                   /note= "human gamma 1 constant region"
XX
PN   WO9640252-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US010070.
XX
PR   07-JUN-1995;   95US-00488376.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Brams P,  Chamat SS,  Pan L,  Walsh EE,  Heard CJ,  Newman RA;
XX
DR   WPI; 1997-099892/09.
DR   N-PSDB; AAT61241.
XX
PT   Human monoclonal antibody specific for respiratory syncytial virus fusion
PT   protein - used for the prevention and treatment of RSV infection.
XX
PS   Example 6; Fig 9b-c; 85pp; English.
XX
CC   A polypeptide (AAW11639) comprises a leader sequence, RF-1 heavy chain
CC   variable region (see also AAW11639), and human gamma 1 constant region.
CC   RF1 is a human monoclonal antibody (hMAb) specific for the fusion protein
CC   of respiratory syncytial virus (RSV). The polypeptide can be produced in
CC   eukaryotic host (e.g. CHO) cells transfected with vector NEOSPLA
CC   incorporating a DNA construct (AAT61241) including the RF-1 VH sequence.
CC   RF-1 and RF-2 heavy and light chains (see also AAW11638, AAW11640-41) are
CC   similarly produced. The transfected host cells provide a constant, stable
CC   supply of anti-RSV F-protein hMAbs for use in the treatment or prevention
CC   of RSV infection
XX
SQ   Sequence 475 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 475;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 210
AAG63640
ID   AAG63640 standard; protein; 475 AA.
XX
AC   AAG63640;
XX
DT   29-OCT-2001  (first entry)
XX
DE   Amino acid sequence of a single chain antibody.
XX
KW   Complementarity determining region; CDR; single chain antibody; ScFv;
KW   hepatitis C virus; HCV; HCV infection; CD81; E2 protein; NS1 protein;
KW   envelope glycoprotein.
XX
OS   Homo sapiens.
XX
PN   WO200158459-A1.
XX
PD   16-AUG-2001.
XX
PF   13-FEB-2001; 2001WO-JP000967.
XX
PR   14-FEB-2000; 2000JP-00034906.
XX
PA   (MITS-) MITSUBISHI-TOKYO PHARM INC.
XX
PI   Itami S,  Shibui T,  Seki M,  Yotsumoto Y,  Matsuura Y,  Miyamura T;
XX
DR   WPI; 2001-496986/54.
DR   N-PSDB; AAH74680.
XX
PT   Remedies for hepatitis C containing substances with antiviral effects
PT   e.g. antibodies, proteins, sulfated polysaccharides and low-molecular
PT   compounds, by inhibiting binding of hepatitis C virus envelope
PT   glycoprotein or CD81.
XX
PS   Disclosure; Page 105-108; 138pp; Japanese.
XX
CC   The present sequence represents a single chain antibody of the invention.
CC   The specification describes a substance can inhibit the binding between
CC   hepatitis C virus (HCV) and cells with potential HCV infection, cells
CC   with expression of CD81, or CD81. This substance is especially an
CC   antibody with affinity towards HCV E2/NS1 protein, containing amino acid
CC   sequences based on the complementarity determining region (CDR) 1, CDR2
CC   and CDR3 of the H and L chain variable regions. The antibody inhibits the
CC   viral envelope glycoprotein. It is also a CD81 inhibitor. The antibodies
CC   and drugs are used for treatment and/or prevention of hepatitis C, or for
CC   diagnosis of hepatitis C
XX
SQ   Sequence 475 AA;

  Query Match             100.0%;  Score 1263;  DB 4;  Length 475;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 211
ADM47075
ID   ADM47075 standard; protein; 475 AA.
XX
AC   ADM47075;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Mouse anti-human G-CSF antibody heavy chain protein.
XX
KW   methylotroph yeast; mammalian sugar chain; OCH1; alpha-1;
KW   6-mannosyl transferase; alpha-1; 2-mannosidase;
KW   orotidin-5'-phosphate decarboxylase; URA3;
```

```
KW   phosphoribosyl-amino-imidazole succinocarboxamide synthase; ADE1;
KW   imidazole-glycerol-phosphate dehydratase; HIS3;
KW   3-isopropyl malate dehydrogenase; LEU2; proteinase A; proteinase B; PRB1;
KW   PEP4; YPS1; KTR1; MNN9; AOX; GAPDH; mannosyl transferase;
KW   glyceraldehyde 3-phosphate dehydrogenase; mannose glycoprotein.
XX
OS   Mus sp.
XX
PN   WO2003091431-A1.
XX
PD   06-NOV-2003.
XX
PF   28-APR-2003; 2003WO-JP005464.
XX
PR   26-APR-2002; 2002JP-00127677.
XX
PA   (KIRI ) KIRIN BEER KK.
PA   (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX
PI   Kobayashi K,  Kitagawa Y,  Komeda T,  Kawashima N,  Jigami Y;
PI   Chiba Y;
XX
DR   WPI; 2003-854401/79.
XX
PT   Producing methylotroph yeast that expresses mammalian sugar chains by
PT   disrupting the OCH1 gene and inserting an alpha-1,2-mannosidase gene.
XX
PS   Example 28; SEQ ID NO 94; 247pp; Japanese.
XX
CC   The invention relates to the production of a methylotroph yeast that
CC   produces mammalian sugar chains, comprising disrupting the OCH1 gene in
CC   the yeast that encodes for alpha-1,6-mannosyl transferase and inserting
CC   and expressing the alpha-1,2-mannosidase gene. The specification also
CC   includes DNA sequences encoding: (a) orotidin-5'-phosphate decarboxylase
CC   (URA3); (b) phosphoribosyl-amino-imidazole succinocarboxamide synthase
CC   (ADE1); (c) imidazole-glycerol-phosphate dehydratase (HIS3); (d) 3-
CC   isopropyl malate dehydrogenase (LEU2); (e) alpha-1,6-mannosyl transferase
CC   (OCH1); (f) proteinase A (PEP4); (g) proteinase B (PRB1); and (h)
CC   aspartic protease (YPS1), mannosyl transferase (KTR1 or MNN9), alcohol
CC   oxidase (AOX) and glyceraldehyde 3-phosphate dehydrogenase (GAPDH) gene
CC   sequences. The yeast is used for the production of human and mammalian
CC   high mannose glycoproteins with high yield and purity. The method is also
CC   useful for producing hybrid or complex sugar chains containing mammalian
CC   type chains. This sequence represents a mouse anti-human G-CSF antibody
CC   heavy chain used in the invention.
XX
SQ   Sequence 475 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 475;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 212
ADL23053
ID   ADL23053 standard; protein; 475 AA.
XX
AC   ADL23053;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Mouse/human chimeric anti-MAG antibody heavy chain #2.
XX
KW   antibody; MAG; myelin associated glycoprotein; heavy chain; CDR; stroke;
KW   neurodegenerative disorder; gene therapy; vaccine; human; mouse.
XX
OS   Homo sapiens.
OS   Mus sp.
OS   Chimeric.
XX
PN   WO2004014953-A2.
XX
PD   19-FEB-2004.
XX
PF   05-AUG-2003; 2003WO-EP008749.
XX
PR   06-AUG-2002; 2002GB-00018229.
PR   06-AUG-2002; 2002GB-00018230.
PR   06-AUG-2002; 2002GB-00018232.
PR   06-AUG-2002; 2002GB-00018234.
XX
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Ellis JH,  Germaschewski V;
XX
DR   WPI; 2004-180641/17.
XX
PT   New altered antibody that binds to and neutralizes myelin associated
PT   glycoprotein (MAG), useful for preparing a composition for treating or
PT   preventing stroke or other neurodegenerative disorders e.g., Alzheimer's
PT   disease.
XX
PS   Example 2; Fig 3; 67pp; English.
XX
CC   The present invention relates to a new altered antibody or its functional
CC   fragment, which binds to and neutralizes myelin associated glycoprotein
CC   (MAG) and comprises a light chain variable domain (VL) comprising
CC   complementary determining region light 1 (CDRL1), CDRL2 or CDRL3 and/or a
CC   heavy chain variable domain (VH) comprising CDRH1, CDRH2 or CDRH3. The
CC   antibody is useful for preparing a composition for treating or preventing
CC   stroke or other neurodegenerative disorders in a human, e.g., traumatic
CC   brain injury, Alzheimer's disease, dementias, peripheral neuropathy,
CC   Parkinson's disease, Huntington's disease and multiple sclerosis. The
CC   present sequence is a human/mouse chimeric anti-MAG antibody heavy chain.
XX
SQ   Sequence 475 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 475;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 213
ADL23056
```

ID ADL23056 standard; protein; 475 AA.
XX
AC ADL23056;
XX
DT 20-MAY-2004 (first entry)
XX
DE Humanised anti-MAG antibody #3.
XX
KW antibody; MAG; myelin associated glycoprotein; stroke;
KW neurodegenerative disorder; gene therapy; vaccine; human.
XX
OS Homo sapiens.
OS Chimeric.
OS Unidentified.
XX
PN WO2004014953-A2.
XX
PD 19-FEB-2004.
XX
PF 05-AUG-2003; 2003WO-EP008749.
XX
PR 06-AUG-2002; 2002GB-00018229.
PR 06-AUG-2002; 2002GB-00018230.
PR 06-AUG-2002; 2002GB-00018232.
PR 06-AUG-2002; 2002GB-00018234.
XX
PA (GLAX) GLAXO GROUP LTD.
XX
PI Ellis JH, Germaschewski V;
XX
DR WPI; 2004-180641/17.
XX
PT New altered antibody that binds to and neutralizes myelin associated
PT glycoprotein (MAG), useful for preparing a composition for treating or
PT preventing stroke or other neurodegenerative disorders e.g., Alzheimer's
PT disease.
XX
PS Example 4; Fig 5; 67pp; English.
XX
CC The present invention relates to a new altered antibody or its functional
CC fragment, which binds to and neutralizes myelin associated glycoprotein
CC (MAG) and comprises a light chain variable domain (VL) comprising
CC complementary determining region light 1 (CDRL1), CDRL2 or CDRL3 and/or a
CC heavy chain variable domain (VH) comprising CDRH1, CDRH2 or CDRH3. The
CC antibody is useful for preparing a composition for treating or preventing
CC stroke or other neurodegenerative disorders in a human, e.g., traumatic
CC brain injury, Alzheimer's disease, dementias, peripheral neuropathy,
CC Parkinson's disease, Huntington's disease and multiple sclerosis. The
CC present sequence is a humanised anti-MAG antibody.
XX
SQ Sequence 475 AA;

Query Match 100.0%; Score 1263; DB 8; Length 475;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475
```

RESULT 214
ADS88794
ID ADS88794 standard; protein; 475 AA.
XX
AC ADS88794;
XX
DT 16-DEC-2004 (first entry)
XX
DE A mouse/human chimeric anti-MAG antibody heavy chain.
XX
KW oligodendrocyte; stroke; neurological disease;
KW myelin-associated glycoprotein; MAG; anti-MAG antibody;
KW Alzheimer's disease; multiple sclerosis;
KW chain complementarity determining region; CDR; chimera.
XX
OS Mus sp.
OS Homo sapiens.
OS Chimeric.
XX
PN WO2004083363-A2.
XX
PD 30-SEP-2004.
XX
PF 02-FEB-2004; 2004WO-EP001016.
XX
PR 19-MAR-2003; 2003GB-00006309.
XX
PA (GLAX) GLAXO GROUP LTD.
XX
PI Vinson M, Irving EA;
XX
DR WPI; 2004-691029/67.
XX
PT Promoting oligodendrocyte survival in humans with neurological diseases,
PT such as Alzheimer's disease, multiple sclerosis and/or stroke, using an
PT anti-myelin-associated glycoprotein (MAG) antibody.
XX
PS Claim 9; SEQ ID NO 9; 45pp; English.
XX
CC The specification describes a method for promoting oligodendrocyte
CC survival in a human suffering or at risk of developing stroke or another
CC neurological diseases. The method comprises administering to the human an
CC anti-myelin-associated glycoprotein (MAG) antibody or its functional
CC fragment. The anti-MAG antibody or its functional fragment is useful in
CC the manufacture of a medicament for the promotion of oligodendrocyte
CC survival in a human suffering from or at risk of developing stroke or
CC another neurological disease. They can also be used in treating
CC neurological diseases, such as Alzheimer's disease, multiple sclerosis
CC and/or stroke, by promoting oligodendrocyte survival. The present
CC sequence represents a mouse/human chimeric anti-MAG antibody heavy chain
CC in which the murine anti-MAG heavy chain variable region is associated
CC with a functional immunoglobulin secretion signal sequence, and with a
CC wild type form of the human IgG1 constant region. Antibodies used in the
CC method of the invention may comprise the present heavy chain.
XX
SQ Sequence 475 AA;

Query Match 100.0%; Score 1263; DB 8; Length 475;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423
```

```
Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 215
ADS88805
ID   ADS88805 standard; protein; 475 AA.
XX
AC   ADS88805;
XX
DT   16-DEC-2004  (first entry)
XX
DE   Humanised anti-MAG antibody heavy chain.
XX
KW   oligodendrocyte; stroke; neurological disease;
KW   myelin-associated glycoprotein; MAG; anti-MAG antibody;
KW   Alzheimer's disease; multiple sclerosis.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO2004083363-A2.
XX
PD   30-SEP-2004.
XX
PF   02-FEB-2004; 2004WO-EP001016.
XX
PR   19-MAR-2003; 2003GB-00006309.
XX
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Vinson M,  Irving EA;
XX
DR   WPI; 2004-691029/67.
XX
PT   Promoting oligodendrocyte survival in humans with neurological diseases,
PT   such as Alzheimer's disease, multiple sclerosis and/or stroke, using an
PT   anti-myelin-associated glycoprotein (MAG) antibody.
XX
PS   Example 4; SEQ ID NO 20; 45pp; English.
XX
CC   The specification describes a method for promoting oligodendrocyte
CC   survival in a human suffering or at risk of developing stroke or another
CC   neurological diseases. The method comprises administering to the human an
CC   anti-myelin-associated glycoprotein (MAG) antibody or its functional
CC   fragment. The anti-MAG antibody or its functional fragment is useful in
CC   the manufacture of a medicament for the promotion of oligodendrocyte
CC   survival in a human suffering from or at risk of developing stroke or
CC   another neurological disease. They can also be used in treating
CC   neurological diseases, such as Alzheimer's disease, multiple sclerosis
CC   and/or stroke, by promoting oligodendrocyte survival. The present
CC   sequence represents a humanised immunoglobulin heavy chain in which the
CC   humanised anti-MAG heavy chain variable region is associated with a
CC   functional immunoglobulin secretion signal sequence, and with a wild type
CC   form of the human IgG1 constant region. Antibodies used in the method of
CC   the invention may comprise the present heavy chain.
XX
SQ   Sequence 475 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 475;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 216
AAR31023
ID   AAR31023 standard; protein; 476 AA.
XX
AC   AAR31023;
XX
DT   25-MAR-2003  (revised)
DT   19-MAY-1993  (first entry)
XX
DE   Antibody D heavy chain.
XX
KW   Heavy; light; chain; antibody; D; monoclonal; peripheral; blood;
KW   lymphocyte; hepatitis A virus; HAV; sero; positive; patient; murine;
KW   B5B3; polyadenylated; cDNA library; human; kappa; L; H.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .19
FT                   /note= "Signal peptide"
FT   Region          20. .49
FT                   /label= FR1
FT   Region          50. .54
FT                   /label= CDR1
FT   Region          55. .68
FT                   /label= FR2
FT   Region          69. .84
FT                   /label= CDR2
FT   Region          85. .113
FT                   /label= FR3
FT   Region          114. .121
FT                   /label= CDR3
FT   Region          122. .132
FT                   /label= FR4
FT   Domain          133. .241
FT                   /label= CH1
FT   Region          242. .262
FT                   /label= HINGE
FT   Domain          263. .379
FT                   /label= CH2
FT   Domain          380. .497
FT                   /label= CH3
XX
PN   EP523949-A1.
XX
PD   20-JAN-1993.
XX
PF   14-JUL-1992;   92EP-00306420.
XX
PR   15-JUL-1991;   91GB-00015284.
PR   01-AUG-1991;   91GB-00016594.
PR   23-MAR-1992;   92GB-00006284.
XX
PA   (WELL ) WELLCOME FOUND LTD.
XX
PI   Crowe JS,  Lewis AP;
XX
DR   WPI; 1993-019951/03.
DR   N-PSDB; AAQ35099.
XX
PT   Prodn. of recombinant primate antibodies - useful for treating infections
PT   caused by hepatitis A, B and C, herpes, cytomegalovirus, AIDS, ARC, also
PT   treat multiple sclerosis, arthritis etc.
XX
PS   Disclosure; Fig 2; 35pp; English.
```

XX
CC The sequences given in AAR31023-24 represent the heavy and light chains
CC of Antibody D respectively. Antibody D is a monoclonal antibody which was
CC derived from peripheral blood lymphocytes from a hepatitis A virus (HAV)
CC sero positive patient. Antibody D is closely related in nature to murine
CC antibody B5B3. Total RNA was isolated from antibody D expressing cells
CC and polyadenylated RNA was extracted. These polyA RNA's were used to
CC prepare a cDNA library which was screened for human kappa light (L)
CC chains and two positive clones were detected. Further heavy (H) chain
CC clones were also isolated. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 476 AA;

Query Match 100.0%; Score 1263; DB 2; Length 476;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476
```

RESULT 217
AAW01818
ID AAW01818 standard; protein; 476 AA.
XX
AC AAW01818;
XX
DT 17-OCT-2003 (revised)
DT 25-MAY-1997 (first entry)
XX
DE Primatised anti-human B7.1 antigen antibody 7C10 heavy chain.
XX
KW Monoclonal antibody; cynomolgus monkey; macaque; 7C10;
KW primatised antibody; B7 antigen; CD28; immunosuppressive;
KW autoimmune disease; idiopathic thrombocytopaenia purpura;
KW systemic lupus erythematosus; rheumatoid arthritis; psoriasis;
KW type 1 diabetes mellitus; graft versus host disease; hetero-hybridoma;
KW transfectoma.
XX
OS Macaca; cynomolgus.
OS Homo sapiens.
OS Chimeric.
XX
PN WO9640878-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US010053.
XX
PR 07-JUN-1995; 95US-00487550.
XX
PA (IDEC-) IDEC PHARM CORP.
XX
PI Anderson DR, Brams P, Hanna N, Shestowsky WS;
XX
DR WPI; 1997-108638/10.
DR N-PSDB; AAT62510.
XX
PT Monkey monoclonal antibody binding human B7.1 or B7.2 antigen - useful
PT for treating auto:immune disease or graft-versus-host disease.
XX
PS Claim 6; Fig 8B; 81pp; English.
XX
CC 2 Polypeptides (AAW01817 and AAW01818) respectively comprise primatised
CC forms of the light and heavy chains of cynomolgus monkey anti-human B7.1
CC antigen monoclonal antibody 7C10. Cloned 7C10 light and heavy variable
CC genes (see also AAT62509 and AAT62510) are inserted into an expression
CC vector (pref. NEOSPLA) which contains human light and heavy chain
CC constant region genes to allow prodn. of the primatised antibody in e.g.
CC CHO cells. Primatised 7B6 and 16C10 anti-B7.1 antibodies have also been
CC produced (see also AAW01819-22). The primatised antibodies inhibit the
CC B7:CD28 pathway, making them useful immunosuppressants for the treatment
CC of autoimmune disorders and graft-versus-host disease. (Updated on 17-OCT
CC -2003 to standardise OS field)
XX
SQ Sequence 476 AA;

Query Match 100.0%; Score 1263; DB 2; Length 476;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476
```

RESULT 218
AAW01822
ID AAW01822 standard; protein; 476 AA.
XX
AC AAW01822;
XX
DT 17-OCT-2003 (revised)
DT 25-MAY-1997 (first entry)
XX
DE Primatised anti-human B7.1 antigen antibody 16C10 heavy chain.
XX
KW Monoclonal antibody; cynomolgus monkey; macaque; 16C10;
KW primatised antibody; B7 antigen; CD28; immunosuppressive;
KW autoimmune disease; idiopathic thrombocytopaenia purpura;
KW systemic lupus erythematosus; rheumatoid arthritis; psoriasis;
KW type 1 diabetes mellitus; graft versus host disease; hetero-hybridoma;
KW transfectoma.
XX
OS Macaca; cynomolgus.
OS Homo sapiens.
OS Chimeric.
XX
PN WO9640878-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US010053.
XX
PR 07-JUN-1995; 95US-00487550.
XX
PA (IDEC-) IDEC PHARM CORP.
XX
PI Anderson DR, Brams P, Hanna N, Shestowsky WS;
XX
DR WPI; 1997-108638/10.

```
DR   N-PSDB; AAT62513.
XX
PT   Monkey monoclonal antibody binding human B7.1 or B7.2 antigen - useful
PT   for treating auto:immune disease or graft-versus-host disease.
XX
PS   Claim 14; Fig 10B; 81pp; English.
XX
CC   2 Polypeptides (AAW01821 and AAW01822) respectively comprise primatised
CC   forms of the light and heavy chains of cynomolgus monkey anti-human B7.1
CC   antigen monoclonal antibody 16C10. Cloned 16C10 light and heavy variable
CC   genes (see also AAT62512 and AAT62513) are inserted into an expression
CC   vector (pref. NEOSPLA) which contains human light and heavy chain
CC   constant region genes to allow prodn. of the primatised antibody in e.g.
CC   CHO cells. Primatised 7C10 and 7B6 anti-B7.1 antibodies have also been
CC   produced (see also AAW01817-20). The primatised antibodies inhibit the
CC   B7:CD28 pathway, making them useful immunosuppressants for the treatment
CC   of autoimmune disorders and graft-versus-host disease. (Updated on 17-OCT
CC   -2003 to standardise OS field)
XX
SQ   Sequence 476 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 219
AAW63761
ID   AAW63761 standard; protein; 476 AA.
XX
AC   AAW63761;
XX
DT   29-SEP-1998  (first entry)
XX
DE   Macaque primatized 7C10 heavy chain DNA.
XX
KW   Monoclonal antibody; Mab; macaque; heavy chain; primate; antigen; CD80;
KW   CD86; inhibitor; immunosuppressant; treatment; autoimmune disease; IL-2;
KW   T cell/B cell interaction; tumour; inflammation; imaging agent; vaccine;
KW   immunogen; anti-idiotype reagent; interleukin-2; IgG; immunoglobulin G;
KW   T cell proliferation; ss.
XX
OS   Macaca fascicularis.
XX
PN   WO9819706-A1.
XX
PD   14-MAY-1998.
XX
PF   29-OCT-1997;   97WO-US019906.
XX
PR   08-NOV-1996;   96US-00746361.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Anderson DR,  Hanna N,  Brams P;
XX
DR   WPI; 1998-286601/25.
```

```
DR   N-PSDB; AAV35485.
XX
PT   New monoclonal antibodies specific for B7.1 or B7.2 antigens and
PT   inhibiting binding to CD28 - useful as specific immunosuppressants for
PT   treating diseases that involve interactions between T and B cells, e.g.
PT   graft rejection or tumours.
XX
PS   Example 7; Fig 3b; 87pp; English.
XX
CC   This sequence represents a primatized form of the antibody 7C10 heavy
CC   chain from macaque. This sequence is used in a method which studies new
CC   monoclonal antibodies (MAb's) that bind selectively to B7.1 (CD80) or to
CC   B7.2 (CD86) antigens and inhibits binding of these antigens to CD28. Such
CC   Mab's are specific immunosuppressants for treatment of diseases involving
CC   T cell/B cell interactions, particularly autoimmune disease, specifically
CC   idiopathic thrombocytopaenia purpura, systemic lupus erythematosus, type
CC   I diabetes mellitus, rheumatoid arthritis, psoriasis, aplastic anaemia,
CC   inflammatory bowel disease, allergy and multiple sclerosis, graft vs.
CC   host diseases, B cell lymphoma, infections (including by human immune
CC   deficiency virus) or inflammatory disease and tumours. Optionally the MAb
CC   can be conjugated to a drug or toxin. MAb's, or their fragments, can also
CC   be used as imaging agents and as vaccines or immunogens to develop anti-
CC   idiotype reagents. MAb's are optionally combined with other proteins or
CC   small molecule immunosuppressants. Blocking B7/CD28 interactions induces
CC   long-term, antigen-specific immunosuppression, i.e. it inhibits
CC   production of interleukin-2 (IL-2), T cell proliferation and antigen-
CC   specific immunoglobulin G (IgG) responses
XX
SQ   Sequence 476 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 220
AAW63765
ID   AAW63765 standard; protein; 476 AA.
XX
AC   AAW63765;
XX
DT   29-SEP-1998  (first entry)
XX
DE   Macaque primatized 16C10 heavy chain protein.
XX
KW   Monoclonal antibody; Mab; macaque; heavy chain; primate; antigen; CD80;
KW   CD86; inhibitor; immunosuppressant; treatment; autoimmune disease; IL-2;
KW   T cell/B cell interaction; tumour; inflammation; imaging agent; vaccine;
KW   immunogen; anti-idiotype reagent; interleukin-2; IgG; immunoglobulin G;
KW   T cell proliferation.
XX
OS   Macaca fascicularis.
XX
PN   WO9819706-A1.
XX
PD   14-MAY-1998.
XX
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```
PF   29-OCT-1997;   97WO-US019906.
XX
PR   08-NOV-1996;   96US-00746361.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Anderson DR,  Hanna N,  Brams P;
XX
DR   WPI; 1998-286601/25.
DR   N-PSDB; AAV35489.
XX
PT   New monoclonal antibodies specific for B7.1 or B7.2 antigens and
PT   inhibiting binding to CD28 - useful as specific immunosuppressants for
PT   treating diseases that involve interactions between T and B cells, e.g.
PT   graft rejection or tumours.
XX
PS   Example 7; Fig 5b; 87pp; English.
XX
CC   This sequence represents a primatized form of the antibody 16C10 heavy
CC   chain from macaque. This sequence is used in a method which studies new
CC   monoclonal antibodies (MAb's) that bind selectively to B7.1 (CD80) or to
CC   B7.2 (CD86) antigens and inhibits binding of these antigens to CD28. Such
CC   Mab's are specific immunosuppressants for treatment of diseases involving
CC   T cell/B cell interactions, particularly autoimmune disease, specifically
CC   idiopathic thrombocytopaenia purpura, systemic lupus erythematosus, type
CC   I diabetes mellitus, rheumatoid arthritis, psoriasis, aplastic anaemia,
CC   inflammatory bowel disease, allergy and multiple sclerosis, graft vs.
CC   host diseases, B cell lymphoma, infections (including by human immune
CC   deficiency virus) or inflammatory disease and tumours. Optionally the MAb
CC   can be conjugated to a drug or toxin. MAb's, or their fragments, can also
CC   be used as imaging agents and as vaccines or immunogens to develop anti-
CC   idiotype reagents. MAb's are optionally combined with other proteins or
CC   small molecule immunosuppressants. Blocking B7/CD28 interactions induces
CC   long-term, antigen-specific immunosuppression, i.e. it inhibits
CC   production of interleukin-2 (IL-2), T cell proliferation and antigen-
CC   specific immunoglobulin G (IgG) responses
XX
SQ   Sequence 476 AA;

  Query Match          100.0%;  Score 1263;  DB 2;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 221
AAW88464
ID   AAW88464 standard; protein; 476 AA.
XX
AC   AAW88464;
XX
DT   10-MAY-1999  (first entry)
XX
DE   Monoclonal antibody 4B5 heavy chain variable region.
XX
KW   Antigen binding fragment 4B5; monoclonal antibody; cancer; neoplasm;
KW   diagnosis; therapy; melanoma; neuroblastoma; glioma; sarcoma;
KW   lung carcinoma; metastasis; anti-idiotype antibody; GD2 antigen; human.
XX
OS   Homo sapiens.
XX
PN   WO9902545-A2.
XX
PD   21-JAN-1999.
XX
PF   08-JUL-1998;   98WO-IB001046.
XX
PR   08-JUL-1997;   97US-0051945P.
XX
PA   (NOVO-) NOVOPHARM BIOTECH INC.
XX
PI   Dan MD;
XX
DR   WPI; 1999-120769/10.
DR   N-PSDB; AAX06951.
XX
PT   New antibody 4B5 polynucleotides and polypeptides - used to develop
PT   products for the diagnosis and treatment of cancers and for prophylactic
PT   therapy to reduce risk of recurrence.
XX
PS   Claim 1; Page 79-80; 83pp; English.
XX
CC   This polypeptide comprises the heavy chain variable region of the
CC   recombinant human monoclonal antibody (MAb) 4B5. 4B5 recognises
CC   antibodies specific for GD2 antigen antibodies. Antibodies specific for
CC   GD2 recognise various cancers including glioblastoma, neuroblastoma,
CC   malignant and/or metastatic melanoma, breast adenocarcinoma, lung
CC   adenocarcinoma, small cell lung carcinoma, colon adenocarcinoma and
CC   prostate adenocarcinoma. The invention encompasses 4B5 derivatives with
CC   immunologic specificity for antibodies specific for GD2. These
CC   derivatives, or antigen binding fragments, comprise regions of the 4B5
CC   VDJ junction and regions spanning the 4B5 CDRs. Other derivatives include
CC   Fab, F(ab')2, Fab', scFv and isolated heavy and light chains (see also
CC   AAW88465). Polynucleotide fragments (see AAX06951-54) encoding 4B5
CC   antibody V regions are also provided, and therapeutic plasmids and
CC   vectors, including vaccinia virus vectors, comprising these
CC   polynucleotides. 4B5 has been shown to mimic GD2, and is particularly
CC   useful in generating a host immune response to cancer. Products of the
CC   invention can be used in the detection and treatment of e.g. astrocytoma,
CC   oligodendroglioma, ependymoma, medulloblastoma, primitive neural
CC   ectodermal tumour (PNET), pancreatic ductal adenocarcinoma, small and
CC   large cell lung adenocarcinomas, squamous cell carcinoma,
CC   bronchoalveoarcarcinoma, epithelial adenocarcinoma, and liver metastases,
CC   hepatoma, cholangiocarcinoma, breast tumours such as ductal and lobular
CC   adenocarcinoma, squamous and adenocarcinomas of the uterine cervix,
CC   uterine and ovarian epithelial carcinoma, prostatic adenocarcinoma,
CC   transitional squamous cell carcinoma of the bladder, B and T cell
CC   lymphoma (nodular and diffuse), plasmacytoma, acute and chronic leukemia,
CC   malignant melanoma, soft tissue sarcoma and leiomyosarcoma
XX
SQ   Sequence 476 AA;

  Query Match          100.0%;  Score 1263;  DB 2;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476
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RESULT 222
AAU11539
ID   AAU11539 standard; protein; 476 AA.
XX
AC   AAU11539;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Protein sequence of primatised form of the heavy chain of 7C10 antibody.
XX
KW   Human; macaque monkey; light chain; primatised antibody; 7C10 antibody;
KW   neuroprotective; apoptosis inducer; allergy; CD28 receptor antagonist;
KW   B7_1 antigen; CD80; B7_2 antigen; CD86; B cell cancer; metastasis;
KW   tumour; B cell lymphoma; B cell leukaemia; autoimmune disease;
KW   graft-vs-host disease; immunosuppression; organ rejection; interleukin-2;
KW   IL-2; mutant; mutein.
XX
OS   Homo sapiens.
OS   Macaca sp.
OS   Synthetic.
OS   Chimeric.
XX
PN   WO200189567-A1.
XX
PD   29-NOV-2001.
XX
PF   22-MAY-2001; 2001WO-US016364.
XX
PR   22-MAY-2000; 2000US-00576424.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Anderson DR,  Hanna N,  Brams P;
XX
DR   WPI; 2002-089895/12.
DR   N-PSDB; AAS17243.
XX
PT   Use of monoclonal antibody which specifically binds to B7.1 antigen CD80
PT   and/or B7.2 antigen CD86 for inducing apoptosis of B7+ cells, treating
PT   cancer, graft-vs-host disease and autoimmune disease such as allergy.
XX
PS   Example 8; Fig 3b; 89pp; English.
XX
CC   The present invention relates to a new use of a monoclonal antibody which
CC   specifically binds to B7.1 antigen (CD80) and/or B7.2 antigen (CD86) for
CC   inducing the apoptosis of B7+ cells. The invention is useful for treating
CC   diseases such as B cell cancer, lymphoma, a cancer where B cells promote
CC   the growth and/or metastasis of tumours, B cell lymphoma, B cell
CC   leukaemia, and autoimmune diseases such as idiopathic thrombocytopenia
CC   purpura, systemic lupus, erythematosus, type 1 diabetes mellitus,
CC   rheumatoid arthritis, psoriasis, aplastic anaemia, inflammatory bile
CC   disease, allergy, multiple sclerosis or graft-vs-host disease. The
CC   antibody is useful for immunosuppression in a human or animal and for
CC   treating or preventing resistance to or rejection of transplanted organ
CC   or tissue for treating proliferative and hyperproliferative diseases, for
CC   treating reversible obstructive airways disease, intestinal inflammations
CC   and allergies e.g. Crohn's disease and ulcerative colitis, food-related
CC   allergies e.g. migraine, rhinitis and eczema, and other types of
CC   allergies. The present protein sequence represents the heavy chain of
CC   7C10, a primatised antibody used in the invention to induce apoptosis and
CC   inhibit production of interleukin-2 (IL-2)
XX
SQ   Sequence 476 AA;

  Query Match           100.0%;  Score 1263;  DB 5;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 223
AAU11646
ID   AAU11646 standard; protein; 476 AA.
XX
AC   AAU11646;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Protein sequence of primatised form of the heavy chain of 16C10 antibody.
XX
KW   Human; macaque monkey; light chain; primatised antibody; 16C10 antibody;
KW   neuroprotective; apoptosis inducer; allergy; CD28 receptor antagonist;
KW   B7_1 antigen; CD80; B7_2 antigen; CD86; B cell cancer; metastasis;
KW   tumour; B cell lymphoma; B cell leukaemia; autoimmune disease;
KW   graft-vs-host disease; immunosuppression; organ rejection; interleukin-2;
KW   IL-2; mutant; mutein.
XX
OS   Homo sapiens.
OS   Macaca sp.
OS   Synthetic.
OS   Chimeric.
XX
PN   WO200189567-A1.
XX
PD   29-NOV-2001.
XX
PF   22-MAY-2001; 2001WO-US016364.
XX
PR   22-MAY-2000; 2000US-00576424.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Anderson DR,  Hanna N,  Brams P;
XX
DR   WPI; 2002-089895/12.
DR   N-PSDB; AAS17247.
XX
PT   Use of monoclonal antibody which specifically binds to B7.1 antigen CD80
PT   and/or B7.2 antigen CD86 for inducing apoptosis of B7+ cells, treating
PT   cancer, graft-vs-host disease and autoimmune disease such as allergy.
XX
PS   Example 8; Fig 5b; 89pp; English.
XX
CC   The present invention relates to a new use of a monoclonal antibody which
CC   specifically binds to B7.1 antigen (CD80) and/or B7.2 antigen (CD86) for
CC   inducing the apoptosis of B7+ cells. The invention is useful for treating
CC   diseases such as B cell cancer, lymphoma, a cancer where B cells promote
CC   the growth and/or metastasis of tumours, B cell lymphoma, B cell
CC   leukaemia, and autoimmune diseases such as idiopathic thrombocytopenia
CC   purpura, systemic lupus, erythematosus, type 1 diabetes mellitus,
CC   rheumatoid arthritis, psoriasis, aplastic anaemia, inflammatory bile
CC   disease, allergy, multiple sclerosis or graft-vs-host disease. The
CC   antibody is useful for immunosuppression in a human or animal and for
CC   treating or preventing resistance to or rejection of transplanted organ
CC   or tissue for treating proliferative and hyperproliferative diseases, for
CC   treating reversible obstructive airways disease, intestinal inflammations
CC   and allergies e.g. Crohn's disease and ulcerative colitis, food-related
CC   allergies e.g. migraine, rhinitis and eczema, and other types of
CC   allergies. The present protein sequence represents the heavy chain of
```

```
CC   16C10, a primatised antibody used in the invention to induce apoptosis
CC   and inhibit production of interleukin-2 (IL-2)
XX
SQ   Sequence 476 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 224
AAE37360
ID   AAE37360 standard; protein; 476 AA.
XX
AC   AAE37360;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Monkey 7C10 antibody heavy chain protein.
XX
KW   Monkey; antibody dependent cellular cytotoxicity; ADCC; cell lymphoma;
KW   complement dependent cytotoxicity; CDC; Burkitt's type leukaemia; MCL;
KW   mantle cell lymphoma; Hodgkin's lymphoma; non-Hodgkin's lymphoma; NHL;
KW   B cell leukaemia; chronic lymphocytic leukaemia; CLL; FCC; cytostatic;
KW   diffuse large cell lymphoma; DLCL; Waldenstrom's Macroglobulinaemia;
KW   monocytic cell leukaemia; antibody.
XX
OS   Macaca sp.
XX
PN   WO2003039486-A2.
XX
PD   15-MAY-2003.
XX
PF   12-NOV-2002; 2002WO-US036226.
XX
PR   09-NOV-2001; 2001US-0331187P.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Hariharan K,  Hanna N;
XX
DR   WPI; 2003-441463/41.
DR   N-PSDB; AAD56527.
XX
PT   Potentiating antibody dependent cellular cytotoxicity or complement
PT   dependent cytotoxicity activity of anti-CD80 antibody against CD80
PT   positive cells, treating B cell malignancy, by administering anti-CD80
PT   antibody.
XX
PS   Example 15; Fig 8B; 105pp; English.
XX
CC   The invention relates to a method for treating B cell malignancy using
CC   anti-CD80 antibody alone or in combination with anti-CD20 antibody. The
CC   method is useful to potentiate antibody dependent cellular cytotoxicity
CC   (ADCC) or complement dependent cytotoxicity (CDC) activity of anti-CD80
CC   antibody against CD80 positive cells, and treating B cell malignancy
CC   including B cell lymphoma (e.g. mantle cell lymphoma (MCL), Hodgkin's
CC   lymphoma, non-Hodgkin's lymphoma, low grade/follicular non-Hodgkin's
CC   lymphoma (NHL), cell lymphoma (FCC), diffuse large cell lymphoma (DLCL),
CC   small lymphocyte (SL) NHL, intermediate grade/follicular NHL, high grade
CC   immunoblastic NHL, high grade lymphoblastic NHL, intermediate grade
CC   diffuse NHL, high grade small non-cleaved cell NHL, bulky disease NHL and
CC   Waldenstrom's Macroglobulinaemia) or B cell leukaemia (e.g. ALL-L3
CC   (Burkitt's type leukaemia), chronic lymphocytic leukaemia (CLL) and
CC   monocytic cell leukaemia). The present sequence is monkey 7C10 antibody
CC   heavy chain protein. This sequence is used to illustrate the method of
CC   the invention
XX
SQ   Sequence 476 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 225
ABR61564
ID   ABR61564 standard; protein; 476 AA.
XX
AC   ABR61564;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Human MAb IgG1b12 heavy chain.
XX
KW   Adeno-associated virus; rAAV; IgG1b12; ScFvX5; anti-HIV; antibacterial;
KW   antirheumatic; antiarthritic; cytostatic; sedative; antiinflammatory;
KW   neuroprotective; gene therapy; vaccine; antibody; MAb.
XX
OS   Homo sapiens.
XX
PN   WO2003087324-A2.
XX
PD   23-OCT-2003.
XX
PF   09-APR-2003; 2003WO-US010865.
XX
PR   09-APR-2002; 2002US-0371501P.
XX
PA   (CHIL-) CHILDRENS HOSPITAL INC.
XX
PI   Clark KR,  Johnson PR;
XX
DR   WPI; 2003-833721/77.
DR   N-PSDB; ACF58045.
XX
PT   New recombinant adeno-associated virus (rAAV)/IgG1b12 or rAAV/ScFvX5
PT   genome, useful for preventing or treating viral infections (e.g. HIV),
PT   bacterial infections or other chronic disease states (e.g. cancer,
PT   inflammation or kuru).
XX
PS   Example 1; Page 35-37; 0pp; English.
XX
CC   The invention relates to a recombinant adeno-associated virus (rAAV)/
```

```
CC   IgG1b12 or rAAV/ScFvX5 genome. The rAAV is useful for gene delivery,
CC   particularly in delivering antibody genes to target cells in mammals. The
CC   antibodies may be used to prevent and/or treat viral infections
CC   (particularly HIV), bacterial infections and other chronic disease states
CC   (e.g. cancer, rheumatoid arthritis, inflammation, fatal familial
CC   insomnia, kuru, Mad Cow Disease or Alpers syndrome). The present sequence
CC   represents the human monoclonal antibody (MAb) IgG1b12 heavy chain
XX
SQ   Sequence 476 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 226
ADM05603
ID   ADM05603 standard; protein; 476 AA.
XX
AC   ADM05603;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human protein of the invention SEQ ID NO:4288.
XX
KW   human; gene therapy; diagnostic marker; pharmaceutical.
XX
OS   Homo sapiens.
XX
PN   EP1347046-A1.
XX
PD   24-SEP-2003.
XX
PF   12-APR-2002; 2002EP-00008400.
XX
PR   22-MAR-2002; 2002JP-00137785.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Sugiyama T,  Otsuki T,  Wakamatsu A,  Sato H,  Ishii S;
PI   Yamamoto J,  Isono Y,  Hio Y,  Otsuka K,  Nagai K,  Irie R,  Tamechika I;
PI   Seki N,  Yoshikawa T,  Otsuka M,  Nagahari K,  Masuho Y;
XX
DR   WPI; 2003-723558/69.
DR   N-PSDB; ADM03160.
XX
PT   New polynucleotides and polypeptides are useful in gene therapy, for
PT   developing a diagnostic marker or medicines for regulating their
PT   expression and activity, or as a target of gene therapy.
XX
PS   Claim 1; SEQ ID NO 4288; 305pp; English.
XX
CC   The invention relates to a novel human polynucleotide and the encoded
CC   polypeptide. A polynucleotide of the invention may have a use in gene
CC   therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC   as a primer for synthesizing the polynucleotide or as a probe for
CC   detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are
CC   useful in gene therapy, for developing a diagnostic marker or medicines
CC   for regulating their expression and activity, or as a target of gene
CC   therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
CC   are useful as pharmaceutical agents. The present sequence represents a
CC   protein sequence of the invention.
XX
SQ   Sequence 476 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 227
AAW90207
ID   AAW90207 standard; protein; 477 AA.
XX
AC   AAW90207;
XX
DT   10-MAY-1999  (first entry)
XX
DE   hB7.2Fc soluble fusion protein.
XX
KW   B7 binding molecule; costimulatory molecule; B7.1; CD80; B7.2; CD86;
KW   T cell activation; inhibitor; graft versus host disease;
KW   transplant rejection; allograft rejection; autoimmune disease; allergy;
KW   therapy; human; antibody; hB7.1fc.
XX
OS   Homo sapiens.
OS   Synthetic.
OS   Chimeric.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .16
FT                   /note= "potential eukaryotic secretory signal peptide"
FT   Domain          17. .239
FT                   /note= "human B7.2 (mature protein) extracellular domain"
FT   Peptide         240. .245
FT                   /note= "introduced by PCR cloning strategy"
FT   Protein         246. .477
FT                   /note= "human IgG1-Fc (hinge-CH2-CH3)"
XX
PN   WO9858965-A2.
XX
PD   30-DEC-1998.
XX
PF   22-JUN-1998;   98WO-EP003791.
XX
PR   20-JUN-1997;   97EP-00870092.
XX
PA   (INNO-) INNOGENETICS NV.
XX
PI   Lorre K,  Sablon E,  Buyse M,  Bosman A;
XX
DR   WPI; 1999-105615/09.
XX
PT   New molecules which bind B7.1 and B7.2 - useful to prevent and treat
```

PT immune diseases including allograft rejection.
XX
PS Example 3.1.1.3; Fig 3; 182pp; English.
XX
CC This 54 kDa soluble fusion protein, termed hB7.2Fc, is composed of human
CC co-stimulatory molecule B7.2 extracellular domain fused C-terminally to
CC human IgG1-Fc. It was produced by PCR amplification of hB7.2 cDNA in
CC plasmid pcDNAIneohB7.2, and insertion of the amplified cDNA into pVL-Fc
CC (ICCG3048), resulting in pVLshB7.2-Fc (ICCG3004) baculotransfer plasmid.
CC The invention relates to molecules such as diabodies, trivalent and
CC tetravalent antibodies and small antigen binding peptides which can cross
CC -link, or cross-react with, B7.1 and B7.2 expressed on professional
CC antigen presenting cells leading to the inhibition of antigen-specific T
CC cell activation. Methods to produce such molecules are provided. The
CC molecules are used to treat or prevent diseases of the immune system, in
CC particular graft rejection, graft versus host disease, allergy and
CC autoimmune diseases (claimed)
XX
SQ Sequence 477 AA;

Query Match 100.0%; Score 1263; DB 2; Length 477;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 246 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 305

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 306 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 365

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 366 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 425

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 426 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 477

RESULT 228
ADM05604
ID ADM05604 standard; protein; 477 AA.
XX
AC ADM05604;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human protein of the invention SEQ ID NO:4289.
XX
KW human; gene therapy; diagnostic marker; pharmaceutical.
XX
OS Homo sapiens.
XX
PN EP1347046-A1.
XX
PD 24-SEP-2003.
XX
PF 12-APR-2002; 2002EP-00008400.
XX
PR 22-MAR-2002; 2002JP-00137785.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
XX
DR WPI; 2003-723558/69.
DR N-PSDB; ADM03161.
XX
PT New polynucleotides and polypeptides are useful in gene therapy, for
PT developing a diagnostic marker or medicines for regulating their
PT expression and activity, or as a target of gene therapy.
XX
PS Claim 1; SEQ ID NO 4289; 305pp; English.
XX
CC The invention relates to a novel human polynucleotide and the encoded
CC polypeptide. A polynucleotide of the invention may have a use in gene
CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC as a primer for synthesizing the polynucleotide or as a probe for
CC detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are
CC useful in gene therapy, for developing a diagnostic marker or medicines
CC for regulating their expression and activity, or as a target of gene
CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides
CC are useful as pharmaceutical agents. The present sequence represents a
CC protein sequence of the invention.
XX
SQ Sequence 477 AA;

Query Match 100.0%; Score 1263; DB 7; Length 477;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 246 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 305

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 306 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 365

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 366 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 425

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 426 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 477

RESULT 229
ADQ65990
ID ADQ65990 standard; protein; 477 AA.
XX
AC ADQ65990;
XX
DT 07-OCT-2004 (first entry)
XX
DE Novel human protein sequence #963.
XX
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW gene therapy; diagnostic marker; morbid state; osteoporosis;
KW neurological disease; Alzheimer's disease; Parkinson's disease; dementia;
KW cancer.
XX
OS Homo sapiens.
XX
PN EP1440981-A2.
XX
PD 28-JUL-2004.
XX
PF 21-JAN-2004; 2004EP-00001196.
XX
PR 21-JAN-2003; 2003JP-00102206.
PR 09-MAY-2003; 2003JP-00131392.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI Yamamoto J, Isono Y, Nagai K, Irie R;
XX
DR WPI; 2004-535376/52.
DR N-PSDB; ADQ63802.
XX

PT Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS Claim 1; SEQ ID NO 3151; 2449pp; English.
XX
CC The invention relates to 2495 novel polynucleotides (I) and their encoded
CC polypeptides, sequences hybridizing to these nucleotides, sequences
CC encoding partial polypeptides and sequences having 70% or 90% identity to
CC the nucleotide and protein sequences. The nucleotides and polypeptides
CC are useful as diagnostic markers or therapeutic target for the diseases
CC or morbid states. They are also useful for treating osteoporosis,
CC neurological diseases, Alzheimer's diseases, Parkinson's diseases,
CC dementia and various cancers. This sequence corresponds to a protein
CC sequence of the invention.
XX
SQ Sequence 477 AA;

Query Match 100.0%; Score 1263; DB 8; Length 477;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 246 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 305

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 306 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 365

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 366 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 425

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 426 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 477

RESULT 230
ADR10018
ID ADR10018 standard; protein; 477 AA.
XX
AC ADR10018;
XX
DT 04-NOV-2004 (first entry)
XX
DE Human protein useful for treating neurological disease Seq 3524.
XX
KW human; oligo-capping method; diagnostic marker; gene therapy;
KW osteoporosis; neurological disease; Alzheimer's disease;
KW Parkinson's disease; dementia; short memory; cancer;
KW sense or motor function; emotional reaction; fear response; panic;
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW tranquiliser.
XX
OS Homo sapiens.
XX
PN EP1447413-A2.
XX
PD 18-AUG-2004.
XX
PF 12-FEB-2004; 2004EP-00003145.
XX
PR 14-FEB-2003; 2003JP-00102207.
PR 09-MAY-2003; 2003JP-00131452.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Yamamoto J, Nishikawa T, Isono Y, Sugiyama T, Otsuki T;
PI Wakamatsu A, Ishii S, Nagai K, Irie R;
XX
DR WPI; 2004-583265/57.
DR N-PSDB; ADR08062.
XX
PT New 1995 cDNA, useful for treating osteoporosis, neurological diseases,
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS Claim 1; SEQ ID NO 3524; 2686pp; English.
XX
CC This invention relates to novel, isolated full length human cDNA
CC molecules and the encoded proteins thereof. Specifically, it refers to
CC cDNA clones obtained by an oligo-capping method, where none of these
CC clones are identical to any known human mRNAs. The present invention
CC describes an immunoassay to identify agonists and antagonists, as well as
CC antibodies, antisense molecules and siRNAs that can all be used to bind
CC to and modulate expression of the cDNA molecules. As such, these
CC molecules are useful for diagnostic markers or therapeutic targets for
CC the various diseases or morbid states. In particular, they are useful in
CC gene therapy for treating osteoporosis, neurological disease, Alzheimer's
CC disease, Parkinson's disease, dementia, short memory and various cancers,
CC as well as for maintaining equilibrium of sense or motor function, and
CC for treating emotional reaction, fear response and panic. Accordingly,
CC they exhibit osteopathic, neuroprotective, nootropic, antiparkinsonian,
CC cytostatic and tranquiliser activities. This polypeptide is a protein
CC encoded by a full length human cDNA sequence of the invention. NOTE: This
CC sequence is not given in the sequence listing of the specification but
CC can be obtained on CD-ROM from the European Patent Office, Vienna Sub-
CC office.
XX
SQ Sequence 477 AA;

Query Match 100.0%; Score 1263; DB 8; Length 477;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
Db 246 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 305

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
Db 306 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 365

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
Db 366 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 425

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
Db 426 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 477

RESULT 231
AAW63763
ID AAW63763 standard; protein; 478 AA.
XX
AC AAW63763;
XX
DT 29-SEP-1998 (first entry)
XX
DE Macaque primatized 7B6 heavy chain protein.
XX
KW Monoclonal antibody; Mab; macaque; heavy chain; primate; antigen; CD80;
KW CD86; inhibitor; immunosuppressant; treatment; autoimmune disease; IL-2;
KW T cell/B cell interaction; tumour; inflammation; imaging agent; vaccine;
KW immunogen; anti-idiotype reagent; interleukin-2; IgG; immunoglobulin G;
KW T cell proliferation.
XX
OS Macaca fascicularis.
XX
PN WO9819706-A1.
XX
PD 14-MAY-1998.
XX
PF 29-OCT-1997; 97WO-US019906.
XX

PR 08-NOV-1996; 96US-00746361.
XX
PA (IDEC-) IDEC PHARM CORP.
XX
PI Anderson DR, Hanna N, Brams P;
XX
DR WPI; 1998-286601/25.
DR N-PSDB; AAV35487.
XX
PT New monoclonal antibodies specific for B7.1 or B7.2 antigens and
PT inhibiting binding to CD28 - useful as specific immunosuppressants for
PT treating diseases that involve interactions between T and B cells, e.g.
PT graft rejection or tumours.
XX
PS Example 7; Fig 4b; 87pp; English.
XX
CC This sequence represents a primatized form of the antibody 7B6 heavy
CC chain from macaque. This sequence is used in a method which studies new
CC monoclonal antibodies (MAb's) that bind selectively to B7.1 (CD80) or to
CC B7.2 (CD86) antigens and inhibits binding of these antigens to CD28. Such
CC Mab's are specific immunosuppressants for treatment of diseases involving
CC T cell/B cell interactions, particularly autoimmune disease, specifically
CC idiopathic thrombocytopaenia purpura, systemic lupus erythematosus, type
CC I diabetes mellitus, rheumatoid arthritis, psoriasis, aplastic anaemia,
CC inflammatory bowel disease, allergy and multiple sclerosis, graft vs.
CC host diseases, B cell lymphoma, infections (including by human immune
CC deficiency virus) or inflammatory disease and tumours. Optionally the MAb
CC can be conjugated to a drug or toxin. MAb's, or their fragments, can also
CC be used as imaging agents and as vaccines or immunogens to develop anti-
CC idiotype reagents. MAb's are optionally combined with other proteins or
CC small molecule immunosuppressants. Blocking B7/CD28 interactions induces
CC long-term, antigen-specific immunosuppression, i.e. it inhibits
CC production of interleukin-2 (IL-2), T cell proliferation and antigen-
CC specific immunoglobulin G (IgG) responses
XX
SQ Sequence 478 AA;

Query Match 100.0%; Score 1263; DB 2; Length 478;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478
```

RESULT 232
AAU11644
ID AAU11644 standard; protein; 478 AA.
XX
AC AAU11644;
XX
DT 12-MAR-2002 (first entry)
XX
DE Protein sequence of primatised form of the heavy chain of 7B6 antibody.
XX
KW Human; macaque monkey; light chain; primatised antibody; 7B6 antibody;
KW neuroprotective; apoptosis inducer; allergy; CD28 receptor antagonist;
KW B7_1 antigen; CD80; B7_2 antigen; CD86; B cell cancer; metastasis;
KW tumour; B cell lymphoma; B cell leukaemia; autoimmune disease;
KW graft-vs-host disease; immunosuppression; organ rejection; interleukin-2;
KW IL-2; mutant; mutein.
XX
OS Homo sapiens.
OS Macaca sp.
OS Synthetic.
OS Chimeric.
XX
PN WO200189567-A1.
XX
PD 29-NOV-2001.
XX
PF 22-MAY-2001; 2001WO-US016364.
XX
PR 22-MAY-2000; 2000US-00576424.
XX
PA (IDEC-) IDEC PHARM CORP.
XX
PI Anderson DR, Hanna N, Brams P;
XX
DR WPI; 2002-089895/12.
DR N-PSDB; AAS17245.
XX
PT Use of monoclonal antibody which specifically binds to B7.1 antigen CD80
PT and/or B7.2 antigen CD86 for inducing apoptosis of B7+ cells, treating
PT cancer, graft-vs-host disease and autoimmune disease such as allergy.
XX
PS Example 8; Fig 4b; 89pp; English.
XX
CC The present invention relates to a new use of a monoclonal antibody which
CC specifically binds to B7.1 antigen (CD80) and/or B7.2 antigen (CD86) for
CC inducing the apoptosis of B7+ cells. The invention is useful for treating
CC diseases such as B cell cancer, lymphoma, a cancer where B cells promote
CC the growth and/or metastasis of tumours, B cell lymphoma, B cell
CC leukaemia, and autoimmune diseases such as idiopathic thrombocytopenia
CC purpura, systemic lupus, erythematosus, type 1 diabetes mellitus,
CC rheumatoid arthritis, psoriasis, aplastic anaemia, inflammatory bile
CC disease, allergy, multiple sclerosis or graft-vs-host disease. The
CC antibody is useful for immunosuppression in a human or animal and for
CC treating or preventing resistance to or rejection of transplanted organ
CC or tissue for treating proliferative and hyperproliferative diseases, for
CC treating reversible obstructive airways disease, intestinal inflammations
CC and allergies e.g. Crohn's disease and ulcerative colitis, food-related
CC allergies e.g. migraine, rhinitis and eczema, and other types of
CC allergies. The present protein sequence represents the heavy chain of
CC 7B6, a primatised antibody used in the invention to induce apoptosis
XX
SQ Sequence 478 AA;

Query Match 100.0%; Score 1263; DB 5; Length 478;
Best Local Similarity 100.0%; Pred. No. 3.6e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478
```

RESULT 233
AAE37362
ID AAE37362 standard; protein; 478 AA.
XX

```
AC   AAE37362;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Monkey 7B6 antibody heavy chain protein.
XX
KW   Monkey; antibody dependent cellular cytotoxicity; ADCC; cell lymphoma;
KW   complement dependent cytotoxicity; CDC; Burkitt's type leukaemia; MCL;
KW   mantle cell lymphoma; Hodgkin's lymphoma; non-Hodgkin's lymphoma; NHL;
KW   B cell leukaemia; chronic lymphocytic leukaemia; CLL; FCC; cytostatic;
KW   diffuse large cell lymphoma; DLCL; Waldenstrom's Macroglobulinaemia;
KW   monocytic cell leukaemia; antibody.
XX
OS   Macaca sp.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 134
FT                   /note= "Encoded by TAA"
FT   Misc-difference 158
FT                   /note= "Encoded by CCC"
XX
PN   WO2003039486-A2.
XX
PD   15-MAY-2003.
XX
PF   12-NOV-2002; 2002WO-US036226.
XX
PR   09-NOV-2001; 2001US-0331187P.
XX
PA   (IDEC-) IDEC PHARM CORP.
XX
PI   Hariharan K,  Hanna N;
XX
DR   WPI; 2003-441463/41.
DR   N-PSDB; AAD56529.
XX
PT   Potentiating antibody dependent cellular cytotoxicity or complement
PT   dependent cytotoxicity activity of anti-CD80 antibody against CD80
PT   positive cells, treating B cell malignancy, by administering anti-CD80
PT   antibody.
XX
PS   Example 15; Fig 9B; 105pp; English.
XX
CC   The invention relates to a method for treating B cell malignancy using
CC   anti-CD80 antibody alone or in combination with anti-CD20 antibody. The
CC   method is useful to potentiate antibody dependent cellular cytotoxicity
CC   (ADCC) or complement dependent cytotoxicity (CDC) activity of anti-CD80
CC   antibody against CD80 positive cells, and treating B cell malignancy
CC   including B cell lymphoma (e.g. mantle cell lymphoma (MCL), Hodgkin's
CC   lymphoma, non-Hodgkin's lymphoma, low grade/follicular non-Hodgkin's
CC   lymphoma (NHL), cell lymphoma (FCC), diffuse large cell lymphoma (DLCL),
CC   small lymphocyte (SL) NHL, intermediate grade/follicular NHL, high grade
CC   immunoblastic NHL, high grade lymphoblastic NHL, intermediate grade
CC   diffuse NHL, high grade small non-cleaved cell NHL, bulky disease NHL and
CC   Waldenstrom's Macroglobulinaemia) or B cell leukaemia (e.g. ALL-L3
CC   (Burkitt's type leukaemia), chronic lymphocytic leukaemia (CLL) and
CC   monocytic cell leukaemia). The present sequence is monkey 7B6 antibody
CC   heavy chain protein. This sequence is used to illustrate the method of
CC   the invention
XX
SQ   Sequence 478 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 478;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 234
ADQ67023
ID   ADQ67023 standard; protein; 478 AA.
XX
AC   ADQ67023;
XX
DT   07-OCT-2004  (first entry)
XX
DE   Novel human protein sequence #1996.
XX
KW   osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW   gene therapy; diagnostic marker; morbid state; osteoporosis;
KW   neurological disease; Alzheimer's disease; Parkinson's disease; dementia;
KW   cancer.
XX
OS   Homo sapiens.
XX
PN   EP1440981-A2.
XX
PD   28-JUL-2004.
XX
PF   21-JAN-2004; 2004EP-00001196.
XX
PR   21-JAN-2003; 2003JP-00102206.
PR   09-MAY-2003; 2003JP-00131392.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Sugiyama T,  Otsuki T,  Wakamatsu A,  Sato H,  Ishii S;
PI   Yamamoto J,  Isono Y,  Nagai K,  Irie R;
XX
DR   WPI; 2004-535376/52.
DR   N-PSDB; ADQ64835.
XX
PT   Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,
PT   Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS   Claim 1; SEQ ID NO 4184; 2449pp; English.
XX
CC   The invention relates to 2495 novel polynucleotides (I) and their encoded
CC   polypeptides, sequences hybridizing to these nucleotides, sequences
CC   encoding partial polypeptides and sequences having 70% or 90% identity to
CC   the nucleotide and protein sequences. The nucleotides and polypeptides
CC   are useful as diagnostic markers or therapeutic target for the diseases
CC   or morbid states. They are also useful for treating osteoporosis,
CC   neurological diseases, Alzheimer's diseases, Parkinson's diseases,
CC   dementia and various cancers. This sequence corresponds to a protein
CC   sequence of the invention.
XX
SQ   Sequence 478 AA;

  Query Match             100.0%;  Score 1263;  DB 8;  Length 478;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366
```

```
Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 235
AAW90206
ID   AAW90206 standard; protein; 480 AA.
XX
AC   AAW90206;
XX
DT   10-MAY-1999  (first entry)
XX
DE   hB7.1Fc soluble fusion protein.
XX
KW   B7 binding molecule; costimulatory molecule; B7.1; CD80; B7.2; CD86;
KW   T cell activation; inhibitor; graft versus host disease;
KW   transplant rejection; allograft rejection; autoimmune disease; allergy;
KW   therapy; human; antibody; hB7.1fc.
XX
OS   Homo sapiens.
OS   Synthetic.
OS   Chimeric.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .34
FT                   /note= "potential eukaryotic secretory signal peptide"
FT   Domain          35. .241
FT                   /note= "human B7.1 (mature protein) extracellular domain"
FT   Peptide         242. .248
FT                   /note= "introduced by PCR cloning strategy"
FT   Protein         249. .480
FT                   /note= "human IgG1-Fc (hinge-CH2-CH3)"
XX
PN   WO9858965-A2.
XX
PD   30-DEC-1998.
XX
PF   22-JUN-1998;   98WO-EP003791.
XX
PR   20-JUN-1997;   97EP-00870092.
XX
PA   (INNO-) INNOGENETICS NV.
XX
PI   Lorre K,  Sablon E,  Buyse M,  Bosman A;
XX
DR   WPI; 1999-105615/09.
XX
PT   New molecules which bind B7.1 and B7.2 - useful to prevent and treat
PT   immune diseases including allograft rejection.
XX
PS   Example 3.1.1.3; Fig 2; 182pp; English.
XX
CC   This 54 kDa soluble fusion protein, termed hB7.1Fc, is composed of human
CC   co-stimulatory molecule B7.1 extracellular domain fused C-terminally to
CC   human IgG1-Fc. It was produced by PCR amplification of hB7.1 cDNA in
CC   plasmid pcDNAIneohB7.1, and insertion of the amplified cDNA into pVL-Fc
CC   (ICCG3048), resulting in pVLshB7.1-Fc (ICCG3005) baculotransfer plasmid.
CC   The invention relates to molecules such as diabodies, trivalent and
CC   tetravalent antibodies and small antigen binding peptides which can cross
CC   -link, or cross-react with, B7.1 and B7.2 expressed on professional
CC   antigen presenting cells leading to the inhibition of antigen-specific T
CC   cell activation. Methods to produce such molecules are provided. The
CC   molecules are used to treat or prevent diseases of the immune system, in
CC   particular graft rejection, graft versus host disease, allergy and
CC   autoimmune diseases (claimed)
XX
SQ   Sequence 480 AA;
```

```
  Query Match           100.0%;  Score 1263;  DB 2;  Length 480;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 236
AAU81008
ID   AAU81008 standard; protein; 480 AA.
XX
AC   AAU81008;
XX
DT   09-APR-2002  (first entry)
XX
DE   BSL1-Ig fusion construct.
XX
KW   Human; immunosuppressive; antirheumatic; antiarthritic; antiulcer;
KW   antianaemic; antipsoriatic; B7-related polypeptide; BSL1; BSL2; BSL3;
KW   autoimmune disease; rheumatoid arthritis; multiple sclerosis;
KW   Hashimoto's thyroiditis; Graves' disease; Crohn's disease; psoriasis;
KW   ulcerative colitis; pernicious anaemia; bone marrow transplantation;
KW   graft versus host disease; organ transplantation.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200194413-A2.
XX
PD   13-DEC-2001.
XX
PF   06-JUN-2001; 2001WO-US018257.
XX
PR   06-JUN-2000; 2000US-0209811P.
PR   28-FEB-2001; 2001US-0272107P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI   Mikesell GE,  Chang H,  Finger JN,  Yang G,  Lu P,  Zhou X,  Peach R;
XX
DR   WPI; 2002-090141/12.
DR   N-PSDB; ABK24012.
XX
PT   Nucleic acids encoding B7-related polypeptides, i.e. BSL1, BSL2, or BSL3
PT   polypeptides, useful for treating autoimmune diseases (e.g. rheumatoid
PT   arthritis, multiple sclerosis, and psoriasis), and graft versus host
PT   disease.
XX
PS   Example 2; Fig 2B; 179pp; English.
XX
CC   The invention relates to novel nucleic acids encoding B7-related
CC   polypeptides. The B7-related polypeptides include the BSL1, BSL2, or BSL3
CC   polypeptides, or their soluble fragments. The nucleic acid, polypeptide,
CC   and antibodies are useful for treating autoimmune diseases (e.g.
CC   rheumatoid arthritis, multiple sclerosis, Hashimoto's thyroiditis,
CC   Graves' disease, Crohn's disease, ulcerative colitis, pernicious anaemia
CC   and psoriasis. They may also be used to treat tissue, bone marrow, and
CC   organ transplantation, and graft versus host disease. AAU81007-AAU81015
CC   represent B7-related proteins, BSL1, BSL2 and BSL3 amino acid sequences
```

```
CC   and related sequences of the invention
XX
SQ   Sequence 480 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 237
AAO16239
ID   AAO16239 standard; protein; 480 AA.
XX
AC   AAO16239;
XX
DT   28-MAR-2003  (first entry)
XX
DE   B7-related protein - SEQ ID No 13.
XX
KW   Gene therapy; B7-related fusion protein; BSL2; viral infection;
KW   immune response modulation; inflammatory response modulation; cancer;
KW   transplantation rejection; graft versus host disease; asthma; herpes;
KW   chronic obstructive pulmonary disease; HIV; encephalitis; psoriasis;
KW   autoimmune disease; rheumatoid arthritis; multiple sclerosis.
XX
OS   Unidentified.
XX
PN   WO200299119-A2.
XX
PD   12-DEC-2002.
XX
PF   06-JUN-2002; 2002WO-US018049.
XX
PR   06-JUN-2001; 2001US-00875338.
PR   15-FEB-2002; 2002US-00077023.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI   Mikesell GE,  Shen H;
XX
DR   WPI; 2003-140629/13.
DR   N-PSDB; ABT15898.
XX
PT   New isolated B7-related nucleic acid fusion molecules and fusion
PT   polypeptides, useful for diagnostic applications, modulating the
PT   activation of immune or inflammatory response cells, preventing or
PT   treating cancer or psoriasis.
XX
PS   Claim 13; Fig 6B; 188pp; English.
XX
CC   The invention comprises the amino acid and coding sequence of B7-related
CC   (BSL2) fusion proteins. The B7-related fusion proteins of the invention
CC   are useful for modulating the activation of immune or inflammatory
CC   response cells (e.g. T cells). The B7-related fusion proteins are useful
CC   for treating or preventing: transplantation rejection; graft versus host
CC   disease; asthma; chronic obstructive pulmonary disease; cancers; viral
CC   infections (e.g. HIV, herpes or encephalitis); and autoimmune disease
CC   (e.g. rheumatoid arthritis, multiple sclerosis or psoriasis). The present
CC   amino acid sequence represents a B7-related protein
XX
SQ   Sequence 480 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 238
AAO16238
ID   AAO16238 standard; protein; 480 AA.
XX
AC   AAO16238;
XX
DT   28-MAR-2003  (first entry)
XX
DE   B7-related protein - SEQ ID No 11.
XX
KW   Gene therapy; B7-related fusion protein; BSL2; viral infection;
KW   immune response modulation; inflammatory response modulation; cancer;
KW   transplantation rejection; graft versus host disease; asthma; herpes;
KW   chronic obstructive pulmonary disease; HIV; encephalitis; psoriasis;
KW   autoimmune disease; rheumatoid arthritis; multiple sclerosis.
XX
OS   Unidentified.
XX
PN   WO200299119-A2.
XX
PD   12-DEC-2002.
XX
PF   06-JUN-2002; 2002WO-US018049.
XX
PR   06-JUN-2001; 2001US-00875338.
PR   15-FEB-2002; 2002US-00077023.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI   Mikesell GE,  Shen H;
XX
DR   WPI; 2003-140629/13.
DR   N-PSDB; ABT15897.
XX
PT   New isolated B7-related nucleic acid fusion molecules and fusion
PT   polypeptides, useful for diagnostic applications, modulating the
PT   activation of immune or inflammatory response cells, preventing or
PT   treating cancer or psoriasis.
XX
PS   Claim 36; Fig 5B; 188pp; English.
XX
CC   The invention comprises the amino acid and coding sequence of B7-related
CC   (BSL2) fusion proteins. The B7-related fusion proteins of the invention
CC   are useful for modulating the activation of immune or inflammatory
CC   response cells (e.g. T cells). The B7-related fusion proteins are useful
CC   for treating or preventing: transplantation rejection; graft versus host
CC   disease; asthma; chronic obstructive pulmonary disease; cancers; viral
```

```
CC   infections (e.g. HIV, herpes or encephalitis); and autoimmune disease
CC   (e.g. rheumatoid arthritis, multiple sclerosis or psoriasis). The present
CC   amino acid sequence represents a B7-related protein
XX
SQ   Sequence 480 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 239
ABU07263
ID   ABU07263 standard; protein; 480 AA.
XX
AC   ABU07263;
XX
DT   29-JAN-2003  (first entry)
XX
DE   Human expressed protein tag (EPT) #1964.
XX
KW   Translational profiling; expressed protein tag; EPT; kinase; phosphatase;
KW   protease; protease inhibitor; transporter; cytoskeletal protein;
KW   receptor; transcription factor; cancer; MHC;
KW   major histocompatability complex; myeloma; colon cancer; gastric cancer;
KW   adenocarcinoma; sarcoma; melanoma; lymphoma; leukaemia.
XX
OS   Homo sapiens.
XX
PN   WO200278524-A2.
XX
PD   10-OCT-2002.
XX
PF   28-MAR-2002; 2002WO-US009671.
XX
PR   28-MAR-2001; 2001US-0279495P.
PR   21-MAY-2001; 2001US-0292544P.
PR   08-AUG-2001; 2001US-0310801P.
PR   01-OCT-2001; 2001US-0326370P.
PR   04-DEC-2001; 2001US-0336780P.
PR   20-FEB-2002; 2002US-0358985P.
XX
PA   (ZYCO-) ZYCOS INC.
XX
PI   Chicz RM,  Tomlinson AJ,  Urban RG;
XX
DR   WPI; 2003-040607/03.
XX
PT   New polypeptides (e.g. kinases, phosphatases, proteases, transporters,
PT   cytoskeletal proteins, receptors or transcription factors), useful for
PT   treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
PT   leukemia.
XX
PS   Example 2; SEQ ID NO 1964; 134pp; English.
XX
CC   The invention describes a purified polypeptide, which comprises a
CC   fragment of a kinase, phosphatase, protease, protease inhibitor,
CC   transporter, cytoskeletal protein, receptor or transcription factor. The
CC   polypeptide is useful as an immunogenic composition for eliciting in a
CC   mammal an immunogenic response directed against any of the purified
CC   polypeptide. The purified polypeptide, or the antibody that binds to this
CC   polypeptide, is useful for treating cancer. The polypeptide is also
CC   useful for identifying compounds that binds to a naturally processed
CC   class I or class II MHC-binding polypeptide. The polypeptides and
CC   polynucleotides are particularly useful for treating or preventing
CC   myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,
CC   lymphoma or leukaemia. These are also useful for screening agents for
CC   treating the above mentioned diseases. This sequence represents an
CC   expressed protein tag (EPT) isolated from human tissue for translational
CC   profiling. Note: This sequence does not appear in the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 480 AA;

  Query Match             100.0%;  Score 1263;  DB 6;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 240
AAR24442
ID   AAR24442 standard; protein; 481 AA.
XX
AC   AAR24442;
XX
DT   25-MAR-2003  (revised)
DT   02-JAN-1992  (first entry)
XX
DE   Sequence of antibody molecule IgG1.
XX
KW   Antibody; immunoglobulin G1.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 308
FT                   /label= N
FT                   /note= "Substn. to create glycan addition site"
FT   Misc-difference 310
FT                   /label= S
FT                   /note= "see above"
FT   Misc-difference 321
FT                   /label= N
FT                   /note= "see above"
FT   Misc-difference 329
FT                   /label= N
FT                   /note= "see above"
FT   Misc-difference 331
FT                   /label= S
FT                   /note= "see above"
FT   Misc-difference 356
FT                   /label= N
FT                   /note= "see above"
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```
FT   Misc-difference 369
FT                   /label= N
FT                   /note= "see above"
XX
PN   WO9209293-A1.
XX
PD   11-JUN-1992.
XX
PF   18-NOV-1991;   91WO-US008605.
XX
PR   23-NOV-1990;   90US-00618314.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Seed B,  Walz G;
XX
DR   WPI; 1992-216789/26.
DR   N-PSDB; AAQ25443.
XX
PT   Inhibition of cell adhesion mediated through ELAM-1 mol. binding - used
PT   in treating chronic inflammation, rheumatoid arthritis, psoriasis, etc.
XX
PS   Disclosure; Fig 1; 46pp; English.
XX
CC   The IgG1, in its nascent form, bears no sialyl-Lex side chains. The
CC   inventors designed a molecule including several such sites for attachment
CC   of sialyl-Lex side chains (see AAR24442, FT). The additional N-linked
CC   glycosylation sites are introduced at locations which impair complement
CC   fixing and Fc receptor binding ability. They are preferably located in
CC   the CH2 region of the Ig molecule. Antibodies bearing multiple sialyl-Lex
CC   determinants are useful for disrupting undesirable interactions between
CC   cells or proteins. Disrupting this interaction has therapeutic
CC   applications, for example, in minimising inflammation following tissue
CC   injury. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 481 AA;

  Query Match             100.0%;  Score 1263;  DB 2;  Length 481;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        250 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 309

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        310 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 369

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        370 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 429

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        430 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 481


RESULT 241
AAO19052
ID   AAO19052 standard; protein; 489 AA.
XX
AC   AAO19052;
XX
DT   14-NOV-2002  (first entry)
XX
DE   Cell adhesion molecule related protein SEQ ID NO: 7.
XX
KW   Cell adhesion molecule; immune function; immunomodulator; antiallergic;
KW   antiinflammatory; autoimmune disease; allergy; inflammation; vasculitis;
KW   hepatitis; septic shock; tumour.
XX
OS   Unidentified.
XX
PN   WO200264771-A1.
XX
PD   22-AUG-2002.
XX
PF   15-FEB-2002; 2002WO-JP001321.
XX
PR   15-FEB-2001; 2001JP-00039196.
XX
PA   (MOCH ) MOCHIDA PHARM CO LTD.
XX
PI   Nakamura Y,  Sugano S,  Kato Y,  Takahashi T,  Shirakawa K;
XX
DR   WPI; 2002-657596/70.
XX
PT   Cell adhesion molecule-specific to activated leukocyte HRC12337, useful
PT   in diagnosing, studying abnormal immune function and in screening
PT   remedies for e.g. autoimmune diseases, inflammations and tumors.
XX
PS   Disclosure; Page 114-116; 119pp; Japanese.
XX
CC   The present invention relates to the protein and coding sequences of a
CC   novel cell adhesion molecule. This molecule is specific to activated
CC   leukocyte. The protein and its DNA are useful in diagnosing and studying
CC   abnormal immune function and in screening remedies for e.g. autoimmune
CC   diseases, immune failure, allergic diseases, inflammations like
CC   vasculitis, hepatitis and septic shock, and tumours. The present sequence
CC   is a protein described in the exemplification of the invention
XX
SQ   Sequence 489 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 489;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        258 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 317

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        318 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 377

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        378 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 437

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        438 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 489


RESULT 242
ADD25783
ID   ADD25783 standard; protein; 492 AA.
XX
AC   ADD25783;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Binding domain-immunoglobulin fusion protein-associated protein #157.
XX
KW   Binding domain; immunoglobulin; fusion protein; cytostatic;
KW   antiarthritic; immunosuppressive; antidiabetic; antithyroid;
KW   neuroprotective; hinge region; immunoglobulin heavy chain;
KW   CH2 constant region; CH3 constant region; IgG1;
KW   antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;
KW   malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;
KW   rheumatoid arthritis; myasthenia gravis; Grave's disease;
KW   type I diabetes mellitus; multiple sclerosis; autoimmune disease.
XX
OS   Unidentified.
XX
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PN   US2003118592-A1.
XX
PD   26-JUN-2003.
XX
PF   25-JUL-2002; 2002US-00207655.
XX
PR   17-JAN-2001; 2001US-0367358P.
PR   17-JAN-2002; 2002US-00053530.
PR   03-JUN-2002; 2002US-0385691P.
XX
PA   (GENE-) GENECRAFT INC.
XX
PI   Ledbetter JA,  Hayden-Ledbetter MS,  Thompson PA;
XX
DR   WPI; 2003-801317/75.
XX
PT   New binding domain-immunoglobulin fusion protein, useful for treating a
PT   subject having or suspected of having a malignant condition or a B-cell
PT   disorder, e.g. melanoma, Grave's disease or autoimmune disease.
XX
PS   Disclosure; SEQ ID NO 344; 157pp; English.
XX
CC   The invention relates to a binding domain-immunoglobulin fusion protein
CC   comprising a binding domain polypeptide that is fused to an
CC   immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain
CC   CH2 constant region polypeptide that is fused to the hinge region
CC   polypeptide, and an immunoglobulin heavy chain CH3 constant region
CC   polypeptide that is fused to the CH2 constant region polypeptide. The
CC   hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin
CC   hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge
CC   region polypeptide, derived from (a) having 3 or more cysteine residues;
CC   where the mutated human IgG1 immunoglobulin hinge region polypeptide
CC   contains 2 cysteine residues, where the first cysteine is not mutated; a
CC   mutated human IgG1 immunoglobulin hinge region polypeptide, derived from
CC   (a) having 3 or more cysteine residues, where the mutated human IgG1
CC   immunoglobulin hinge region polypeptide contains no more than one
CC   cysteine residue; and a mutated human IgG1 immunoglobulin hinge region
CC   polypeptide, derived from (a) having 3 or more cysteine residues; where
CC   the mutated human IgG1 immunoglobulin hinge region polypeptide contains
CC   no cysteine residues. The binding domain-immunoglobulin fusion protein is
CC   capable of at least one immunological activity comprising antibody
CC   dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The
CC   binding domain polypeptide is capable of specifically binding to an
CC   antigen. Also included are an isolated polynucleotide encoding the
CC   binding domain-immunoglobulin fusion protein, a recombinant expression
CC   construct comprising the polynucleotide (operably linked to a promoter),
CC   a host cell transformed or transfected with a recombinant expression
CC   construct, producing the binding domain-immunoglobulin fusion protein, a
CC   pharmaceutical composition comprising the binding domain-immunoglobulin
CC   fusion protein or polynucleotide and a carrier, and treating a subject
CC   having or suspected of having a malignant condition or a B-cell disorder.
CC   The binding domain-immunoglobulin fusion protein is useful for treating a
CC   subject having or suspected of having a malignant condition or a B-cell
CC   disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,
CC   myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple
CC   sclerosis or autoimmune disease. The present sequence is a binding domain
CC   -immunoglobulin fusion protein-associated protein sequence. Note: The
CC   sequence data for this patent formed part of the printed specification
CC   and is also available in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030118592. The authors have not
CC   identified the sequences in the printed specification by their SEQ ID
CC   number therefore none of the sequences can be explicitly identified.
XX
SQ   Sequence 492 AA;

  Query Match             100.0%;  Score 1263;  DB 7;  Length 492;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        261 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 320

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        321 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 380

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        381 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 440

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        441 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 492


RESULT 243
AAY97172
ID   AAY97172 standard; protein; 497 AA.
XX
AC   AAY97172;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Human FGF-RI Extracellular domain-Ig Fc fusion protein 3.
XX
KW   FGF-R; fibroblast growth factor receptor; extracellular domain; IgG1;
KW   immunoglobulin; G1; oligomerization domain; Fc region; fusion protein;
KW   inhibitor; dimer; antagonist; cytostatic; anti-diabetic; vulnerary;
KW   ophthalmological; anti-proliferative.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .21
FT                   /label= FGF-R1_signal_peptide
FT   Domain          22. .257
FT                   /label= FGF-R1_extracellular_domain
FT                   /note= "The Ig I segment and acid box are deleted"
FT   Domain          59. .111
FT                   /label= Ig_II_segment
FT   Domain          157. .222
FT                   /label= Ig_III_segment
FT   Peptide         258. .265
FT                   /label= Linker
FT   Region          266. .497
FT                   /label= Human_IgG1_Fc_region
FT                   /note= "Contains hinge region and domains CH2 and CH3"
XX
PN   WO200046380-A2.
XX
PD   10-AUG-2000.
XX
PF   07-FEB-2000; 2000WO-US003166.
XX
PR   08-FEB-1999;   99US-0119002P.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Kavanaugh WM,  Ballinger M;
XX
DR   WPI; 2000-514961/46.
DR   N-PSDB; AAA52129.
XX
PT   New polypeptide comprising a fibroblast growth factor receptor
PT   extracellular domain fused to a heterologous oligomerization domain for
PT   treating FGF-, angiogenesis-, or FGF receptor-mediated disorders.
XX
PS   Claim 14; Page 58-59; 70pp; English.
XX
CC   Novel fusion protein constructs comprise a fibroblast growth factor (FGF)
CC   receptor (FGF-R) extracellular domain (ECD) lacking the immunoglobulin
CC   (Ig) I segment fused to a heterologous oligomerization domain that
CC   comprises an immunoglobulin Fc region, hinge region, CH1, CH2, CH3 or CH4
CC   region, or light chain of an immunoglobulin molecule, or a peptide with a
CC   leucine zipper motif. The Ig I segment is not necessary for binding of
```

```
CC   acidic FGF and basic FGF (bFGF). The Ig I deletion further increases the
CC   affinity for aFGF and heparin, protects the core of the molecule from
CC   proteolysis, and abrogates the heparin requirement for aFGF binding. The
CC   new fusion polypeptides are better FGF inhibitors than FGF-R monomer
CC   proteins. The FGFR-Ig Fc fusion dimers are active as FGF antagonists at
CC   subnanomolar concentrations and were 20-fold more potent than the FGF-R
CC   monomer protein as competitors of bFGF binding to immobilized FGF-Rs. The
CC   fusion constructs are useful to treat FGF-, angiogenesis-, or FGF-R-
CC   mediated disorders, such as tumourigenesis (e.g. bladder, breast, lung,
CC   rectal, testis and cervical tumours), neovascularization (e.g. diabetic
CC   retinopathy, neovascular glaucoma, wound healing and corneal scarring)
CC   and hyper-proliferation of vascular smooth muscle cells (e.g.
CC   postangioplasty and postatherectomy restenosis)
XX
SQ   Sequence 497 AA;

  Query Match             100.0%;  Score 1263;  DB 3;  Length 497;
  Best Local Similarity   100.0%;  Pred. No. 3.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 325

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 385

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 445

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        446 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 497


RESULT 244
ABG31025
ID   ABG31025 standard; protein; 499 AA.
XX
AC   ABG31025;
XX
DT   05-NOV-2002  (first entry)
XX
DE   Synthetic mouse/human chimeric fusion protein #1.
XX
KW   Immunosuppressive; antirheumatic; antithyroid; antidiabetic; mouse;
KW   neuroprotective; gene therapy; single chain antibody; variable fragment;
KW   scFv; binding domain-immunoglobulin fusion protein; B-cell disorder;
KW   malignant condition; rheumatoid arthritis; myasthenia gravis; psoriasis;
KW   Grave's disease; Hashimoto's thyroiditis; type I diabetes mellitus;
KW   multiple sclerosis; systemic lupus erythematosus; Sjogrens syndrome;
KW   immune thrombocytopenic purpura; scleroderma; cancer; Chron's disease;
KW   ulcerative colitis; inflammatory bowel disease; immunological effector;
KW   cell mediated cytotoxicity; complement dependent cytotoxicity;
KW   complement fixation; mouse; human.
XX
OS   Mus musculus.
OS   Homo sapiens.
OS   Synthetic.
OS   Chimeric.
XX
FH   Key             Location/Qualifiers
FT   Region          1. .265
FT                   /note= "Mouse anti-human CD20 single chain variable
FT                   fragment (scFv)"
FT   Domain          266. .499
FT                   /note= "Human immunoglobulinG1 (IgG1) wild type hinge,
FT                   fragment of crystallisation, CH2 and CH3 domains"
XX
PN   WO200256910-A1.
XX
PD   25-JUL-2002.
XX
PF   17-JAN-2002; 2002WO-US001487.
XX
PR   17-JAN-2001; 2001US-00765208.
XX
PA   (GENE-) GENECRAFT INC.
XX
PI   Ledbetter JA,  Hayden-Ledbetter M;
XX
DR   WPI; 2002-599691/64.
DR   N-PSDB; ABK89848.
XX
PT   New human binding domain-immunoglobulin fusion protein useful for
PT   treating a subject having or suspected of having a B-cell disorder or
PT   malignant condition e.g. rheumatoid arthritis.
XX
PS   Disclosure; Page 120-121; 136pp; English.
XX
CC   The invention describes a binding domain-immunoglobulin fusion protein
CC   that is capable of at least one immunological activity, comprising a
CC   binding domain polypeptide fused to an immunoglobulin hinge region
CC   polypeptide capable of specifically binding to an antigen, or an
CC   immunoglobulin heavy chain CH2 or CH3 constant region polypeptide fused
CC   to the hinge region polypeptide or to the CH2 constant region
CC   polypeptide. The fusion protein is useful for treating a subject having
CC   or suspected of having a B-cell disorder or malignant condition e.g.
CC   rheumatoid arthritis, myasthenia gravis, Grave's disease, Hashimoto's
CC   thyroiditis, type I diabetes mellitus, multiple sclerosis, systemic lupus
CC   erythematosus, Sjogrens syndrome, immune thrombocytopenic purpura,
CC   psoriasis, scleroderma, cancer and inflammatory bowel disease such as
CC   Chron's disease and ulcerative colitis. The fusion protein retains the
CC   ability to participate in well known immunological effector activities
CC   including antibody dependent cell mediated cytotoxicity and/or complement
CC   fixation in complement dependent cytotoxicity, despite having structures
CC   that would not be expected to be capable of promoting the effector
CC   activities. It can be produced in substantial quantities that are
CC   typically greater than those routinely attained with single-chain
CC   antibody constructs. This is the amino acid sequence of a chimeric fusion
CC   protein created from the mouse anti-human CD20 single chain antibody
CC   variable fragment (scFv) and the human immunoglobulin G (IgG) fragment of
CC   crystallisation (Fv) tail, wild type hinge, CH2 and CH3 domains
XX
SQ   Sequence 499 AA;

  Query Match             100.0%;  Score 1263;  DB 5;  Length 499;
  Best Local Similarity   100.0%;  Pred. No. 3.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        268 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        328 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 387

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 447

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        448 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 499


RESULT 245
ADD25587
ID   ADD25587 standard; protein; 499 AA.
XX
AC   ADD25587;
XX
DT   15-JAN-2004  (first entry)
```

XX
DE Binding domain-immunoglobulin fusion protein-associated protein #71.
XX
KW Binding domain; immunoglobulin; fusion protein; cytostatic;
KW antiarthritic; immunosuppressive; antidiabetic; antithyroid;
KW neuroprotective; hinge region; immunoglobulin heavy chain;
KW CH2 constant region; CH3 constant region; IgG1;
KW antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;
KW malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;
KW rheumatoid arthritis; myasthenia gravis; Grave's disease;
KW type I diabetes mellitus; multiple sclerosis; autoimmune disease.
XX
OS Unidentified.
XX
PN US2003118592-A1.
XX
PD 26-JUN-2003.
XX
PF 25-JUL-2002; 2002US-00207655.
XX
PR 17-JAN-2001; 2001US-0367358P.
PR 17-JAN-2002; 2002US-00053530.
PR 03-JUN-2002; 2002US-0385691P.
XX
PA (GENE-) GENECRAFT INC.
XX
PI Ledbetter JA, Hayden-Ledbetter MS, Thompson PA;
XX
DR WPI; 2003-801317/75.
XX
PT New binding domain-immunoglobulin fusion protein, useful for treating a
PT subject having or suspected of having a malignant condition or a B-cell
PT disorder, e.g. melanoma, Grave's disease or autoimmune disease.
XX
PS Disclosure; SEQ ID NO 148; 157pp; English.
XX
CC The invention relates to a binding domain-immunoglobulin fusion protein
CC comprising a binding domain polypeptide that is fused to an
CC immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain
CC CH2 constant region polypeptide that is fused to the hinge region
CC polypeptide, and an immunoglobulin heavy chain CH3 constant region
CC polypeptide that is fused to the CH2 constant region polypeptide. The
CC hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin
CC hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge
CC region polypeptide, derived from (a) having 3 or more cysteine residues;
CC where the mutated human IgG1 immunoglobulin hinge region polypeptide
CC contains 2 cysteine residues, where the first cysteine is not mutated; a
CC mutated human IgG1 immunoglobulin hinge region polypeptide, derived from
CC (a) having 3 or more cysteine residues, where the mutated human IgG1
CC immunoglobulin hinge region polypeptide contains no more than one
CC cysteine residue; and a mutated human IgG1 immunoglobulin hinge region
CC polypeptide, derived from (a) having 3 or more cysteine residues; where
CC the mutated human IgG1 immunoglobulin hinge region polypeptide contains
CC no cysteine residues. The binding domain-immunoglobulin fusion protein is
CC capable of at least one immunological activity comprising antibody
CC dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The
CC binding domain polypeptide is capable of specifically binding to an
CC antigen. Also included are an isolated polynucleotide encoding the
CC binding domain-immunoglobulin fusion protein, a recombinant expression
CC construct comprising the polynucleotide (operably linked to a promoter),
CC a host cell transformed or transfected with a recombinant expression
CC construct, producing the binding domain-immunoglobulin fusion protein, a
CC pharmaceutical composition comprising the binding domain-immunoglobulin
CC fusion protein or polynucleotide and a carrier, and treating a subject
CC having or suspected of having a malignant condition or a B-cell disorder.
CC The binding domain-immunoglobulin fusion protein is useful for treating a
CC subject having or suspected of having a malignant condition or a B-cell
CC disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,
CC myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple
CC sclerosis or autoimmune disease. The present sequence is a binding domain
CC -immunoglobulin fusion protein-associated protein sequence. Note: The
CC sequence data for this patent formed part of the printed specification
CC and is also available in electronic format directly from USPTO at
CC seqdata.uspto.gov/sequence.html?DocID=20030118592. The authors have not
CC identified the sequences in the printed specification by their SEQ ID
CC number therefore none of the sequences can be explicitly identified.
XX
SQ Sequence 499 AA;

Query Match 100.0%; Score 1263; DB 7; Length 499;
Best Local Similarity 100.0%; Pred. No. 3.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 268 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327

Qy 61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 328 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 387

Qy 121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 447

Qy 181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 448 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 499

RESULT 246
ADD25454
ID ADD25454 standard; protein; 499 AA.
XX
AC ADD25454;
XX
DT 15-JAN-2004 (first entry)
XX
DE Binding domain-immunoglobulin fusion protein-associated protein #5.
XX
KW Binding domain; immunoglobulin; fusion protein; cytostatic;
KW antiarthritic; immunosuppressive; antidiabetic; antithyroid;
KW neuroprotective; hinge region; immunoglobulin heavy chain;
KW CH2 constant region; CH3 constant region; IgG1;
KW antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;
KW malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;
KW rheumatoid arthritis; myasthenia gravis; Grave's disease;
KW type I diabetes mellitus; multiple sclerosis; autoimmune disease.
XX
OS Unidentified.
XX
PN US2003118592-A1.
XX
PD 26-JUN-2003.
XX
PF 25-JUL-2002; 2002US-00207655.
XX
PR 17-JAN-2001; 2001US-0367358P.
PR 17-JAN-2002; 2002US-00053530.
PR 03-JUN-2002; 2002US-0385691P.
XX
PA (GENE-) GENECRAFT INC.
XX
PI Ledbetter JA, Hayden-Ledbetter MS, Thompson PA;
XX
DR WPI; 2003-801317/75.
XX
PT New binding domain-immunoglobulin fusion protein, useful for treating a
PT subject having or suspected of having a malignant condition or a B-cell
PT disorder, e.g. melanoma, Grave's disease or autoimmune disease.
XX
PS Disclosure; SEQ ID NO 15; 157pp; English.
XX
CC The invention relates to a binding domain-immunoglobulin fusion protein
CC comprising a binding domain polypeptide that is fused to an
CC immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain

```
CC   CH2 constant region polypeptide that is fused to the hinge region
CC   polypeptide, and an immunoglobulin heavy chain CH3 constant region
CC   polypeptide that is fused to the CH2 constant region polypeptide. The
CC   hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin
CC   hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge
CC   region polypeptide, derived from (a) having 3 or more cysteine residues;
CC   where the mutated human IgG1 immunoglobulin hinge region polypeptide
CC   contains 2 cysteine residues, where the first cysteine is not mutated; a
CC   mutated human IgG1 immunoglobulin hinge region polypeptide, derived from
CC   (a) having 3 or more cysteine residues, where the mutated human IgG1
CC   immunoglobulin hinge region polypeptide contains no more than one
CC   cysteine residue; and a mutated human IgG1 immunoglobulin hinge region
CC   polypeptide, derived from (a) having 3 or more cysteine residues; where
CC   the mutated human IgG1 immunoglobulin hinge region polypeptide contains
CC   no cysteine residues. The binding domain-immunoglobulin fusion protein is
CC   capable of at least one immunological activity comprising antibody
CC   dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The
CC   binding domain polypeptide is capable of specifically binding to an
CC   antigen. Also included are an isolated polynucleotide encoding the
CC   binding domain-immunoglobulin fusion protein, a recombinant expression
CC   construct comprising the polynucleotide (operably linked to a promoter),
CC   a host cell transformed or transfected with a recombinant expression
CC   construct, producing the binding domain-immunoglobulin fusion protein, a
CC   pharmaceutical composition comprising the binding domain-immunoglobulin
CC   fusion protein or polynucleotide and a carrier, and treating a subject
CC   having or suspected of having a malignant condition or a B-cell disorder.
CC   The binding domain-immunoglobulin fusion protein is useful for treating a
CC   subject having or suspected of having a malignant condition or a B-cell
CC   disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,
CC   myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple
CC   sclerosis or autoimmune disease. The present sequence is a binding domain
CC   -immunoglobulin fusion protein-associated protein sequence. Note: The
CC   sequence data for this patent formed part of the printed specification
CC   and is also available in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030118592. The authors have not
CC   identified the sequences in the printed specification by their SEQ ID
CC   number therefore none of the sequences can be explicitly identified.
XX
SQ   Sequence 499 AA;

  Query Match           100.0%;  Score 1263;  DB 7;  Length 499;
  Best Local Similarity  100.0%;  Pred. No. 3.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        268 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        328 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 387

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 447

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        448 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 499


RESULT 247
ADM42729
ID   ADM42729 standard; protein; 499 AA.
XX
AC   ADM42729;
XX
DT   03-JUN-2004  (first entry)
XX
DE   2H7scFv-Ig, an Ig fusion protein for CD20.
XX
KW   Mouse; antibody; single chain antibody; scFv;
KW   binding domain-immunoglobulin fusion protein;
KW   immunoglobulin hinge region; heavy chain CH2 constant region;
KW   heavy chain CH3 constant region;
KW   antibody dependent cell-mediated cytotoxicity; complement fixation; IgA;
KW   IgG; CD19; CD20; CD37; CD40; L6; CD154; malignant condition; cancer;
KW   B-cell disorder; autoantibody; rheumatoid arthritis; myasthenia gravis;
KW   Grave's disease; type I diabetes mellitus; multiple sclerosis;
KW   autoimmune disease; human.
XX
OS   Mus musculus.
OS   Homo sapiens.
OS   Synthetic.
OS   Chimeric.
XX
PN   US2003133939-A1.
XX
PD   17-JUL-2003.
XX
PF   17-JAN-2002; 2002US-00053530.
XX
PR   17-JAN-2002; 2002US-00053530.
XX
PA   (GENE-) GENECRAFT INC.
XX
PI   Ledbetter JA,  Hayden-Ledbetter MS;
XX
DR   WPI; 2003-843256/78.
DR   N-PSDB; ADM42716.
XX
PT   New binding domain-immunoglobulin fusion protein for treating malignant
PT   conditions (e.g. cancer) or B-cell disorders, comprises a binding domain
PT   polypeptide and immunoglobulin heavy chain CH2 and CH3 constant region
PT   polypeptides.
XX
PS   Example 1; SEQ ID NO 15; 80pp; English.
XX
CC   The invention relates to a binding domain-immunoglobulin fusion protein
CC   comprising a binding domain polypeptide that is fused to an
CC   immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain
CC   CH2 constant region polypeptide that is fused to the hinge region
CC   polypeptide, and an immunoglobulin heavy chain CH3 constant region
CC   polypeptide that is fused to the CH2 constant region polypeptide. The
CC   fusion protein is capable of at least one immunological activity such as
CC   antibody dependent cell-mediated cytotoxicity and complement fixation,
CC   and is capable of specifically binding to an antigen. The hinge region
CC   polypeptide is selected from a mutated hinge region polypeptide that
CC   contains no cysteine residues (and that is derived from a wild-type
CC   immunoglobulin hinge region polypeptide having one or more cysteine
CC   residues), a mutated hinge region polypeptide that contains one cysteine
CC   residue (nd that is derived from a wild-type immunoglobulin hinge region
CC   polypeptide having two or more cysteine residues), a wild-type human
CC   immunoglobulin (Ig)A hinge region polypeptide, a mutated human IgA hinge
CC   region polypeptide that contains no cysteine residues (and that is
CC   derived from a wild-type human IgA region polypeptide) and a mutated
CC   human IgA hinge region polypeptide that contains one cysteine residue
CC   (and that is derived from a wild-type human IgA region polypeptide). Also
CC   included are an isolated polynucleotide encoding the novel fusion
CC   protein, a recombinant expression construct comprising the
CC   polynucleotide, a host cell transformed or transfected with the
CC   expression construct, producing the novel fusion protein (comprising
CC   culturing the host cell under conditions that permit expression of the
CC   novel fusion protein and isolating the binding domain-immunoglobulin
CC   fusion protein from the host cell culture), a pharmaceutical composition
CC   comprising the novel fusion protein in combination with a carrier and
CC   treating a subject having or suspected of having a malignant condition or
CC   a B-cell disorder (comprising administering to the patient an amount of
CC   the novel fusion protein). The mutated hinge region polypeptide exhibits
CC   a reduced ability to dimerise, relative to a wild-type human
CC   immunoglobulin G hinge region polypeptide. The binding domain polypeptide
CC   comprises at least one immunoglobulin variable region polypeptide
CC   selected from an immunoglobulin light chain variable region polypeptide
CC   and an immunoglobulin heavy chain variable region polypeptide, and
CC   optionally at least one linker peptide that is fused to the
CC   immunoglobulin variable region polypeptide. The immunoglobulin variable
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CC   and constant region polypeptides are derived from a human immunoglobulin.
CC   The immunoglobulin heavy chain constant region CH2 and CH3 polypeptides
CC   are of an isotype selected from human IgG and human IgA. The antigen is
CC   selected from CD19, CD20, CD37, CD40 and L6. The binding domain
CC   polypeptide comprises a CD154 extracellular domain, and optionally, at
CC   least one immunoglobulin variable region polypeptide (e.g. mouse Vl and
CC   Vh regions forming single chain antibodies which bind to one of the above
CC   antigens). The composition and methods are useful in treating malignant
CC   conditions (e.g. cancer) and B-cell disorders, including diseases
CC   characterised by autoantibody production, such as rheumatoid arthritis,
CC   myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple
CC   sclerosis or autoimmune diseases. The present sequence represents a
CC   fusion protein of the invention comprising mouse antibody Vl and Vh
CC   regions fused to either human Immunoglobin sequence or CD154
CC   extracellular domain.
XX
SQ   Sequence 499 AA;

  Query Match           100.0%;  Score 1263;  DB 7;  Length 499;
  Best Local Similarity  100.0%;  Pred. No. 3.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        268 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        328 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 387

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 447

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        448 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 499


RESULT 248
ADD25679
ID   ADD25679 standard; protein; 500 AA.
XX
AC   ADD25679;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Binding domain-immunoglobulin fusion protein-associated protein #114.
XX
KW   Binding domain; immunoglobulin; fusion protein; cytostatic;
KW   antiarthritic; immunosuppressive; antidiabetic; antithyroid;
KW   neuroprotective; hinge region; immunoglobulin heavy chain;
KW   CH2 constant region; CH3 constant region; IgG1;
KW   antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;
KW   malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;
KW   rheumatoid arthritis; myasthenia gravis; Grave's disease;
KW   type I diabetes mellitus; multiple sclerosis; autoimmune disease.
XX
OS   Unidentified.
XX
PN   US2003118592-A1.
XX
PD   26-JUN-2003.
XX
PF   25-JUL-2002; 2002US-00207655.
XX
PR   17-JAN-2001; 2001US-0367358P.
PR   17-JAN-2002; 2002US-00053530.
PR   03-JUN-2002; 2002US-0385691P.
XX
PA   (GENE-) GENECRAFT INC.
XX
PI   Ledbetter JA,  Hayden-Ledbetter MS,  Thompson PA;
XX
DR   WPI; 2003-801317/75.
XX
PT   New binding domain-immunoglobulin fusion protein, useful for treating a
PT   subject having or suspected of having a malignant condition or a B-cell
PT   disorder, e.g. melanoma, Grave's disease or autoimmune disease.
XX
PS   Disclosure; SEQ ID NO 240; 157pp; English.
XX
CC   The invention relates to a binding domain-immunoglobulin fusion protein
CC   comprising a binding domain polypeptide that is fused to an
CC   immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain
CC   CH2 constant region polypeptide that is fused to the hinge region
CC   polypeptide, and an immunoglobulin heavy chain CH3 constant region
CC   polypeptide that is fused to the CH2 constant region polypeptide. The
CC   hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin
CC   hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge
CC   region polypeptide, derived from (a) having 3 or more cysteine residues;
CC   where the mutated human IgG1 immunoglobulin hinge region polypeptide
CC   contains 2 cysteine residues, where the first cysteine is not mutated; a
CC   mutated human IgG1 immunoglobulin hinge region polypeptide, derived from
CC   (a) having 3 or more cysteine residues, where the mutated human IgG1
CC   immunoglobulin hinge region polypeptide contains no more than one
CC   cysteine residue; and a mutated human IgG1 immunoglobulin hinge region
CC   polypeptide, derived from (a) having 3 or more cysteine residues; where
CC   the mutated human IgG1 immunoglobulin hinge region polypeptide contains
CC   no cysteine residues. The binding domain-immunoglobulin fusion protein is
CC   capable of at least one immunological activity comprising antibody
CC   dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The
CC   binding domain polypeptide is capable of specifically binding to an
CC   antigen. Also included are an isolated polynucleotide encoding the
CC   binding domain-immunoglobulin fusion protein, a recombinant expression
CC   construct comprising the polynucleotide (operably linked to a promoter),
CC   a host cell transformed or transfected with a recombinant expression
CC   construct, producing the binding domain-immunoglobulin fusion protein, a
CC   pharmaceutical composition comprising the binding domain-immunoglobulin
CC   fusion protein or polynucleotide and a carrier, and treating a subject
CC   having or suspected of having a malignant condition or a B-cell disorder.
CC   The binding domain-immunoglobulin fusion protein is useful for treating a
CC   subject having or suspected of having a malignant condition or a B-cell
CC   disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,
CC   myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple
CC   sclerosis or autoimmune disease. The present sequence is a binding domain
CC   -immunoglobulin fusion protein-associated protein sequence. Note: The
CC   sequence data for this patent formed part of the printed specification
CC   and is also available in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030118592. The authors have not
CC   identified the sequences in the printed specification by their SEQ ID
CC   number therefore none of the sequences can be explicitly identified.
XX
SQ   Sequence 500 AA;

  Query Match           100.0%;  Score 1263;  DB 7;  Length 500;
  Best Local Similarity  100.0%;  Pred. No. 3.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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Db        389 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 448

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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Db        449 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 500
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RESULT 249
ADM97493
ID   ADM97493 standard; protein; 502 AA.
XX
AC   ADM97493;
XX
DT   01-JUL-2004  (first entry)
XX
DE   CD1d-IgG-avidin complex IgG1 fragment SEQ ID NO: 16.
XX
KW   CD1d complex; cytostatic; antiinflammatory; cancer; autoimmune disease;
KW   inflammatory disease; immunosuppressive; antimicrobial; neuroprotective;
KW   antidiabetic; antiarthritic; antirheumatic; ophthalmological;
KW   gastrointestinal; nephrotropic; dermatological; hepatotropic;
KW   beta2-microglobulin.
XX
OS   Unidentified.
XX
PN   WO2004029206-A2.
XX
PD   08-APR-2004.
XX
PF   26-SEP-2003; 2003WO-US030238.
XX
PR   27-SEP-2002; 2002EP-00405838.
XX
PA   (VACC-) VACCINEX INC.
PA   (ROBE/) ROBERT B.
PA   (DOND/) DONDA A.
PA   (CESS/) CESSON V.
PA   (MACH/) MACH J.
XX
PI   Robert B,  Donda A,  Cesson V,  Mach J,  Zauderer M;
XX
DR   WPI; 2004-316095/29.
DR   N-PSDB; ADM97492.
XX
PT   New compound comprising CD1d complexes and an antibody specific for a
PT   cell surface marker, useful for preventing or treating tumors and
PT   autoimmune/inflammatory or infectious diseases, e.g. multiple sclerosis,
PT   diabetes or psoriasis.
XX
PS   Example 4; Page 78; 152pp; English.
XX
CC   The present invention relates to a compound comprising one or more CD1d
CC   complexes and an antibody or its fragment specific for a cell surface
CC   marker. The CD1d complexes comprise a CD1d and a beta2-microglobulin
CC   molecule, and are linked to the antibody or its fragment. The composition
CC   and methods are useful for preventing or treating tumours and
CC   autoimmune/inflammatory or infectious diseases, such as multiple
CC   sclerosis, type I diabetes, ankylosing spondylitis, acute anterior
CC   uveitis, atrophic gastritis, Goodpasture's syndrome, Grave's disease,
CC   Hashimoto's thyroiditis, myasthenia gravis, psoriasis, psoriatic
CC   arthritis, rheumatoid arthritis, systemic lupus erythematosus, systemic
CC   sclerosis, pemphigus vulgaris, pernicious anemia, primary biliary
CC   cirrhosis, ulcerative colitis or autoimmune hepatitis. The present
CC   sequence is a polypeptide used in the exemplification of the invention.
XX
SQ   Sequence 502 AA;

  Query Match           100.0%;  Score 1263;  DB 8;  Length 502;
  Best Local Similarity  100.0%;  Pred. No. 3.8e-91;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
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Db        183 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 242

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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Db        243 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 302

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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Db        303 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 354


RESULT 250
ADD25787
ID   ADD25787 standard; protein; 504 AA.
XX
AC   ADD25787;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Binding domain-immunoglobulin fusion protein-associated protein #160.
XX
KW   Binding domain; immunoglobulin; fusion protein; cytostatic;
KW   antiarthritic; immunosuppressive; antidiabetic; antithyroid;
KW   neuroprotective; hinge region; immunoglobulin heavy chain;
KW   CH2 constant region; CH3 constant region; IgG1;
KW   antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;
KW   malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;
KW   rheumatoid arthritis; myasthenia gravis; Grave's disease;
KW   type I diabetes mellitus; multiple sclerosis; autoimmune disease.
XX
OS   Unidentified.
XX
PN   US2003118592-A1.
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PD   26-JUN-2003.
XX
PF   25-JUL-2002; 2002US-00207655.
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PR   17-JAN-2001; 2001US-0367358P.
PR   17-JAN-2002; 2002US-00053530.
PR   03-JUN-2002; 2002US-0385691P.
XX
PA   (GENE-) GENECRAFT INC.
XX
PI   Ledbetter JA,  Hayden-Ledbetter MS,  Thompson PA;
XX
DR   WPI; 2003-801317/75.
XX
PT   New binding domain-immunoglobulin fusion protein, useful for treating a
PT   subject having or suspected of having a malignant condition or a B-cell
PT   disorder, e.g. melanoma, Grave's disease or autoimmune disease.
XX
PS   Disclosure; SEQ ID NO 348; 157pp; English.
XX
CC   The invention relates to a binding domain-immunoglobulin fusion protein
CC   comprising a binding domain polypeptide that is fused to an
CC   immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain
CC   CH2 constant region polypeptide that is fused to the hinge region
CC   polypeptide, and an immunoglobulin heavy chain CH3 constant region
CC   polypeptide that is fused to the CH2 constant region polypeptide. The
CC   hinge region polypeptide comprises: a wild-type human IgG1 immunoglobulin
CC   hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge
CC   region polypeptide, derived from (a) having 3 or more cysteine residues;
CC   where the mutated human IgG1 immunoglobulin hinge region polypeptide
CC   contains 2 cysteine residues, where the first cysteine is not mutated; a
CC   mutated human IgG1 immunoglobulin hinge region polypeptide, derived from
CC   (a) having 3 or more cysteine residues, where the mutated human IgG1
CC   immunoglobulin hinge region polypeptide contains no more than one
CC   cysteine residue; and a mutated human IgG1 immunoglobulin hinge region
CC   polypeptide, derived from (a) having 3 or more cysteine residues; where
CC   the mutated human IgG1 immunoglobulin hinge region polypeptide contains
CC   no cysteine residues. The binding domain-immunoglobulin fusion protein is
CC   capable of at least one immunological activity comprising antibody
CC   dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The
CC   binding domain polypeptide is capable of specifically binding to an
CC   antigen. Also included are an isolated polynucleotide encoding the
```

CC binding domain-immunoglobulin fusion protein, a recombinant expression
CC construct comprising the polynucleotide (operably linked to a promoter),
CC a host cell transformed or transfected with a recombinant expression
CC construct, producing the binding domain-immunoglobulin fusion protein, a
CC pharmaceutical composition comprising the binding domain-immunoglobulin
CC fusion protein or polynucleotide and a carrier, and treating a subject
CC having or suspected of having a malignant condition or a B-cell disorder.
CC The binding domain-immunoglobulin fusion protein is useful for treating a
CC subject having or suspected of having a malignant condition or a B-cell
CC disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,
CC myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple
CC sclerosis or autoimmune disease. The present sequence is a binding domain
CC -immunoglobulin fusion protein-associated protein sequence. Note: The
CC sequence data for this patent formed part of the printed specification
CC and is also available in electronic format directly from USPTO at
CC seqdata.uspto.gov/sequence.html?DocID=20030118592. The authors have not
CC identified the sequences in the printed specification by their SEQ ID
CC number therefore none of the sequences can be explicitly identified.
XX
SQ Sequence 504 AA;

Query Match 100.0%; Score 1263; DB 7; Length 504;
Best Local Similarity 100.0%; Pred. No. 3.8e-91;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db        273 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 332

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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Job time : 91 secs

GenCore version 5.1.6

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Perfect score: 1263
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1376875 seqs, 326749119 residues

Total number of hits satisfying chosen parameters: 175

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Post-processing: Minimum Match 100%
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Listing first 500 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	1263	100.0	232	16	US-10-617-619-7	Sequence 7, Appli
4	1263	100.0	232	16	US-10-761-593A-26	Sequence 26, Appl
5	1263	100.0	235	14	US-10-207-655-208	Sequence 208, App
6	1263	100.0	247	9	US-09-996-357-13	Sequence 13, Appl
7	1263	100.0	251	14	US-10-008-063-18	Sequence 18, Appl
8	1263	100.0	251	14	US-10-152-363A-6	Sequence 6, Appli
9	1263	100.0	267	9	US-09-996-357-12	Sequence 12, Appl
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11	1263	100.0	288	14	US-10-119-637A-14	Sequence 14, Appl
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98	1263	100.0	476	9	US-09-758-173-4	Sequence 4, Appli
99	1263	100.0	476	9	US-09-758-173-12	Sequence 12, Appl
100	1263	100.0	476	9	US-09-747-669-3	Sequence 3, Appli
101	1263	100.0	476	9	US-09-948-429B-4	Sequence 4, Appli
102	1263	100.0	476	9	US-09-948-429B-12	Sequence 12, Appl
103	1263	100.0	476	13	US-10-124-905-4	Sequence 4, Appli
104	1263	100.0	476	13	US-10-124-905-12	Sequence 12, Appl
105	1263	100.0	476	14	US-10-290-703-3	Sequence 3, Appli
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107	1263	100.0	476	14	US-10-124-807-12	Sequence 12, Appl
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109	1263	100.0	476	14	US-10-291-532-12	Sequence 12, Appl
110	1263	100.0	476	15	US-10-409-938-15	Sequence 15, Appl
111	1263	100.0	476	15	US-10-108-260A-4288	Sequence 4288, Ap
112	1263	100.0	477	15	US-10-108-260A-4289	Sequence 4289, Ap
113	1263	100.0	478	9	US-09-758-173-8	Sequence 8, Appli
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118	1263	100.0	480	9	US-09-875-338-5	Sequence 5, Appli
119	1263	100.0	480	14	US-10-077-023-5	Sequence 5, Appli
120	1263	100.0	480	14	US-10-077-023-133	Sequence 133, App
121	1263	100.0	480	14	US-10-077-023-135	Sequence 135, App
122	1263	100.0	489	15	US-10-468-333-7	Sequence 7, Appli
123	1263	100.0	492	14	US-10-207-655-344	Sequence 344, App
124	1263	100.0	497	15	US-10-683-255-6	Sequence 6, Appli
125	1263	100.0	499	14	US-10-207-655-15	Sequence 15, Appl
126	1263	100.0	499	14	US-10-207-655-148	Sequence 148, App
127	1263	100.0	499	14	US-10-053-530-15	Sequence 15, Appl
128	1263	100.0	500	14	US-10-207-655-240	Sequence 240, App
129	1263	100.0	504	14	US-10-207-655-348	Sequence 348, App
130	1263	100.0	525	15	US-10-683-255-4	Sequence 4, Appli
131	1263	100.0	541	15	US-10-471-151-32	Sequence 32, Appl
132	1263	100.0	543	14	US-10-207-655-345	Sequence 345, App
133	1263	100.0	547	9	US-09-746-359A-54	Sequence 54, Appl
134	1263	100.0	547	9	US-09-951-268-40	Sequence 40, Appl
135	1263	100.0	547	11	US-09-745-792A-54	Sequence 54, Appl
136	1263	100.0	547	15	US-10-424-658-54	Sequence 54, Appl
137	1263	100.0	557	10	US-09-773-877A-14	Sequence 14, Appl
138	1263	100.0	558	15	US-10-471-151-31	Sequence 31, Appl
139	1263	100.0	567	9	US-09-825-561A-16	Sequence 16, Appl
140	1263	100.0	567	10	US-09-773-877A-12	Sequence 12, Appl
141	1263	100.0	567	10	US-09-773-877A-20	Sequence 20, Appl
142	1263	100.0	571	9	US-09-746-359A-53	Sequence 53, Appl
143	1263	100.0	571	9	US-09-951-268-30	Sequence 30, Appl
144	1263	100.0	571	11	US-09-745-792A-53	Sequence 53, Appl
145	1263	100.0	571	15	US-10-424-658-53	Sequence 53, Appl
146	1263	100.0	585	9	US-09-886-404-22	Sequence 22, Appl
147	1263	100.0	585	14	US-10-037-591A-22	Sequence 22, Appl
148	1263	100.0	585	16	US-10-846-352-22	Sequence 22, Appl
149	1263	100.0	592	9	US-09-313-942-8	Sequence 8, Appli
150	1263	100.0	592	9	US-09-935-868-8	Sequence 8, Appli
151	1263	100.0	592	14	US-10-287-035-8	Sequence 8, Appli
152	1263	100.0	592	14	US-10-282-162-8	Sequence 8, Appli
153	1263	100.0	600	16	US-10-334-235-38	Sequence 38, Appl
154	1263	100.0	608	14	US-10-363-427-10	Sequence 10, Appl
155	1263	100.0	622	15	US-10-683-255-2	Sequence 2, Appli
156	1263	100.0	641	16	US-10-617-619-8	Sequence 8, Appli
157	1263	100.0	659	14	US-10-363-427-12	Sequence 12, Appl
158	1263	100.0	679	16	US-10-617-619-11	Sequence 11, Appl
159	1263	100.0	698	9	US-09-875-338-9	Sequence 9, Appli
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161	1263	100.0	701	16	US-10-617-619-6	Sequence 6, Appli
162	1263	100.0	713	16	US-10-679-620-64	Sequence 64, Appl
163	1263	100.0	715	16	US-10-679-620-62	Sequence 62, Appl
164	1263	100.0	731	9	US-09-825-012-46	Sequence 46, Appl
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166	1263	100.0	859	9	US-09-313-942-7	Sequence 7, Appli
167	1263	100.0	859	9	US-09-935-868-7	Sequence 7, Appli
168	1263	100.0	859	14	US-10-287-035-7	Sequence 7, Appli
169	1263	100.0	859	14	US-10-282-162-7	Sequence 7, Appli
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174	1263	100.0	972	15	US-10-418-836-38	Sequence 38, Appl
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ALIGNMENTS

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RESULT 1
US-09-996-357-10
; Sequence 10, Application US/09996357
; Patent No. US20020133001A1
; GENERAL INFORMATION:
;  APPLICANT: Gefter, Malcolm L
;  APPLICANT:  Isreal, David I
;  APPLICANT:  Joyal, John L
;  APPLICANT:  Gosselin, Michael
;  TITLE OF INVENTION: THERAPEUTIC AGENTS AND METHODS OF USE THEREOF FOR
;  TITLE OF INVENTION:  TREATING AN AMYLOIDOGENIC DISEASE
;  FILE REFERENCE: PPI-105
;  CURRENT APPLICATION NUMBER: US/09/996,357
;  CURRENT FILING DATE:  2001-11-27
;  PRIOR APPLICATION NUMBER: 60/253,302
;  PRIOR FILING DATE: 2000-11-27
;  PRIOR APPLICATION NUMBER: 60/250,198
;  PRIOR FILING DATE: 2000-11-29
;  PRIOR APPLICATION NUMBER: 60/257,186
;  PRIOR FILING DATE: 2000-12-20
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
;   LENGTH: 232
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-996-357-10

  Query Match           100.0%;  Score 1263;  DB 9;  Length 232;
  Best Local Similarity  100.0%;  Pred. No. 1e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232


RESULT 2
US-09-389-782-1
; Sequence 1, Application US/09389782
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; Publication No. US20030144187A1
; GENERAL INFORMATION:
;  APPLICANT: Wooden, Scott K.
;  APPLICANT: Mann, Michael B.
;  APPLICANT: Dunstan, Colin R.
;  TITLE OF INVENTION: OPG Fusion Protein Compositions and Methods
;  FILE REFERENCE: A-604
;  CURRENT APPLICATION NUMBER: US/09/389,782
;  CURRENT FILING DATE: 1999-09-03
;  NUMBER OF SEQ ID NOS: 50
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
;   LENGTH: 232
;   TYPE: PRT
;   ORGANISM: Human
US-09-389-782-1

  Query Match           100.0%;  Score 1263;  DB 10;  Length 232;
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Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232


RESULT 3
US-10-617-619-7
; Sequence 7, Application US/10617619
; Publication No. US20040110929A1
; GENERAL INFORMATION:
;  APPLICANT: Bjorn, Soren E
;  APPLICANT:  Nicolaisen, Else M
;  APPLICANT:  Jorgensen, Anker S
;  TITLE OF INVENTION: TF Binding Compound
;  FILE REFERENCE: 6455.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,619
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,568
;  PRIOR FILING DATE: 2002-08-19
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
;   LENGTH: 232
;   TYPE: PRT
;   ORGANISM: Human
US-10-617-619-7

  Query Match           100.0%;  Score 1263;  DB 16;  Length 232;
  Best Local Similarity  100.0%;  Pred. No. 1e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
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Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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RESULT 4
US-10-761-593A-26
; Sequence 26, Application US/10761593A
; Publication No. US20040175824A1
; GENERAL INFORMATION:
;  APPLICANT: Sun, Lee-Hwei K
;  APPLICANT:  Sun, Bill N
;  APPLICANT:  Sun, Cecily R
;  TITLE OF INVENTION: Fc fusion proteins of human erythropoietin with high biological
;  TITLE OF INVENTION:  activities
;  FILE REFERENCE: 02SUN2001-A
;  CURRENT APPLICATION NUMBER: US/10/761,593A
;  CURRENT FILING DATE:  2004-01-21
;  PRIOR APPLICATION NUMBER: 09/932812
;  PRIOR FILING DATE: 2001-08-17
;  NUMBER OF SEQ ID NOS: 28
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 26
;   LENGTH: 232
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-761-593A-26

  Query Match           100.0%;  Score 1263;  DB 16;  Length 232;
  Best Local Similarity  100.0%;  Pred. No. 1e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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RESULT 5
US-10-207-655-208
; Sequence 208, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
;  APPLICANT: Ledbetter, Jeffrey A.
;  APPLICANT:  Hayden-Ledbetter, Martha S.
;  TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
;  FILE REFERENCE: 390069.401C1
;  CURRENT APPLICATION NUMBER: US/10/207,655
;  CURRENT FILING DATE:  2002-07-25
;  NUMBER OF SEQ ID NOS: 426
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 208
;   LENGTH: 235
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Fusion polypeptide
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US-10-207-655-208

Query Match 100.0%; Score 1263; DB 14; Length 235;
Best Local Similarity 100.0%; Pred. No. 1e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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Db        184 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 235
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RESULT 6
US-09-996-357-13
; Sequence 13, Application US/09996357
; Patent No. US20020133001A1
; GENERAL INFORMATION:
; APPLICANT: Gefter, Malcolm L
; APPLICANT: Isreal, David I
; APPLICANT: Joyal, John L
; APPLICANT: Gosselin, Michael
; TITLE OF INVENTION: THERAPEUTIC AGENTS AND METHODS OF USE THEREOF FOR
; TITLE OF INVENTION: TREATING AN AMYLOIDOGENIC DISEASE
; FILE REFERENCE: PPI-105
; CURRENT APPLICATION NUMBER: US/09/996,357
; CURRENT FILING DATE: 2001-11-27
; PRIOR APPLICATION NUMBER: 60/253,302
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/250,198
; PRIOR FILING DATE: 2000-11-29
; PRIOR APPLICATION NUMBER: 60/257,186
; PRIOR FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 13
; LENGTH: 247
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-996-357-13

Query Match 100.0%; Score 1263; DB 9; Length 247;
Best Local Similarity 100.0%; Pred. No. 1.1e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 7

US-10-008-063-18
; Sequence 18, Application US/10008063
; Publication No. US20030092164A1
; GENERAL INFORMATION:
; APPLICANT: Gross, Jane A.
; APPLICANT: Xu, Wenfeng
; APPLICANT: Henne, Randal M.
; APPLICANT: Grant, Francis, J.
; TITLE OF INVENTION: Human Tumor Necrosis Factor Receptor
; FILE REFERENCE: 00-103
; CURRENT APPLICATION NUMBER: US/10/008,063
; CURRENT FILING DATE: 2001-11-05
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 251
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-008-063-18

Query Match 100.0%; Score 1263; DB 14; Length 251;
Best Local Similarity 100.0%; Pred. No. 1.1e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 8
US-10-152-363A-6
; Sequence 6, Application US/10152363A
; Publication No. US20030103986A1
; GENERAL INFORMATION:
; APPLICANT: Rixon, Mark W.
; APPLICANT: Gross, Jane A.
; TITLE OF INVENTION: TACI-Immunoglobulin Fusion Proteins
; FILE REFERENCE: 01-20
; CURRENT APPLICATION NUMBER: US/10/152,363A
; CURRENT FILING DATE: 2002-05-20
; PRIOR APPLICATION NUMBER: 60/293,343
; PRIOR FILING DATE: 2001-05-24
; NUMBER OF SEQ ID NOS: 70
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 251
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-152-363A-6

Query Match 100.0%; Score 1263; DB 14; Length 251;
Best Local Similarity 100.0%; Pred. No. 1.1e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         20 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 79

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         80 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 139
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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 199

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 251


RESULT 9
US-09-996-357-12
; Sequence 12, Application US/09996357
; Patent No. US20020133001A1
; GENERAL INFORMATION:
;  APPLICANT: Gefter, Malcolm L
;  APPLICANT:  Isreal, David I
;  APPLICANT:  Joyal, John L
;  APPLICANT:  Gosselin, Michael
;  TITLE OF INVENTION: THERAPEUTIC AGENTS AND METHODS OF USE THEREOF FOR
;  TITLE OF INVENTION:  TREATING AN AMYLOIDOGENIC DISEASE
;  FILE REFERENCE: PPI-105
;  CURRENT APPLICATION NUMBER: US/09/996,357
;  CURRENT FILING DATE:  2001-11-27
;  PRIOR APPLICATION NUMBER: 60/253,302
;  PRIOR FILING DATE: 2000-11-27
;  PRIOR APPLICATION NUMBER: 60/250,198
;  PRIOR FILING DATE: 2000-11-29
;  PRIOR APPLICATION NUMBER: 60/257,186
;  PRIOR FILING DATE: 2000-12-20
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
;   LENGTH: 267
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:alpha-beta(16-30)Fc
US-09-996-357-12

  Query Match            100.0%;  Score 1263;  DB 9;  Length 267;
  Best Local Similarity   100.0%;  Pred. No. 1.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         36 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 95

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         96 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 155

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 215

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 267


RESULT 10
US-09-822-851B-14
; Sequence 14, Application US/09822851B
; Publication No. US20030095966A1
; GENERAL INFORMATION:
;  APPLICANT: Liu, Yang
;  APPLICANT:  Zheng, Pan
;  APPLICANT:  Bai, Xue-Feng
;  TITLE OF INVENTION: Methods of Blocking Tissue Destruction by Autoreative T Cells
;  FILE REFERENCE: 22727/04047
;  CURRENT APPLICATION NUMBER: US/09/822,851B
;  CURRENT FILING DATE:  2001-03-29
;  NUMBER OF SEQ ID NOS: 16
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 14
;   LENGTH: 288
;   TYPE: PRT
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: residues 1-52 are mouse HSA sequences, residues 53-55 are unknow
;   OTHER INFORMATION: sequences, residues 56-288 are human IgG1 Fc sequences
US-09-822-851B-14

  Query Match            100.0%;  Score 1263;  DB 10;  Length 288;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         56 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 115

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        116 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 175

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        176 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 235

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 287


RESULT 11
US-10-119-637A-14
; Sequence 14, Application US/10119637A
; Publication No. US20030106084A1
; GENERAL INFORMATION:
;  APPLICANT: Liu, Yang
;  APPLICANT:  Liu, Xingluo
;  APPLICANT:  Zheng, Pan
;  APPLICANT:  Bai, Xue-Feng
;  TITLE OF INVENTION: Methods of Blocking Tissue Destruction by Autoreative T Cells
;  FILE REFERENCE: 22727/04117
;  CURRENT APPLICATION NUMBER: US/10/119,637A
;  CURRENT FILING DATE:  2003-02-03
;  PRIOR APPLICATION NUMBER: 09/822,851
;  PRIOR FILING DATE: 2001-03-29
;  PRIOR APPLICATION NUMBER: 60/192,814
;  PRIOR FILING DATE: 2000-03-29
;  NUMBER OF SEQ ID NOS: 16
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 14
;   LENGTH: 288
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
;   NAME/KEY: DOMAIN
;   LOCATION: (1)..(52)
;   OTHER INFORMATION: mouse HSA
;   FEATURE:
;   NAME/KEY: DOMAIN
;   LOCATION: (53)..(55)
;   OTHER INFORMATION: sequence created by inventor; not from any known organism
;   FEATURE:
;   NAME/KEY: DOMAIN
;   LOCATION: (56)..(288)
;   OTHER INFORMATION: human IgG1 Fc
US-10-119-637A-14

  Query Match            100.0%;  Score 1263;  DB 14;  Length 288;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         56 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 115

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        116 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 175

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        176 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 235

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 287
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RESULT 12
US-10-370-749-48
; Sequence 48, Application US/10370749
; Publication No. US20040002587A1
; GENERAL INFORMATION:
; APPLICANT: Watkins, Jeffry D.
; APPLICANT: Allan, Barrett
; TITLE OF INVENTION: Fc Region Variants
; FILE REFERENCE: AME-07823
; CURRENT APPLICATION NUMBER: US/10/370,749
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/358,161
; PRIOR FILING DATE: 2002-02-20
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 48
; LENGTH: 329
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-370-749-48

Query Match 100.0%; Score 1263; DB 15; Length 329;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 157

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        158 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 217

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 277

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 329
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RESULT 13
US-09-995-898A-15
; Sequence 15, Application US/09995898A
; Publication No. US20030027253A1
; GENERAL INFORMATION:
; APPLICANT: Presnell, Scott R.
; APPLICANT: Xu, Wenfeng
; APPLICANT: No. US20030027253A1ak, Julia E.
; APPLICANT: Whitmore, Theodore E.
; APPLICANT: Grant, Francis J.
; TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR19
; FILE REFERENCE: 00-108
; CURRENT APPLICATION NUMBER: US/09/995,898A
; CURRENT FILING DATE: 2001-11-28
; PRIOR APPLICATION NUMBER: US 60/253,561
; PRIOR FILING DATE: 2000-11-28
; PRIOR APPLICATION NUMBER: US 60/267,211
; PRIOR FILING DATE: 2001-02-07
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 15
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-995-898A-15

Query Match 100.0%; Score 1263; DB 10; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330
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RESULT 14
US-09-892-949-38
; Sequence 38, Application US/09892949
; Publication No. US20030096339A1
; GENERAL INFORMATION:
; APPLICANT: Sprecher, Cindy A.
; APPLICANT: Presnell, Scott R.
; APPLICANT: Gao, Zeren
; APPLICANT: Whitmore, Theodore E.
; APPLICANT: Kuijper, Joseph L.
; APPLICANT: Maurer, Mark F.
; TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR17
; FILE REFERENCE: 00-42
; CURRENT APPLICATION NUMBER: US/09/892,949
; CURRENT FILING DATE: 2001-06-26
; PRIOR APPLICATION NUMBER: US 60/214,282
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/214,955
; PRIOR FILING DATE: 2000-06-29
; PRIOR APPLICATION NUMBER: US 60/267,963
; PRIOR FILING DATE: 2001-08-02
; NUMBER OF SEQ ID NOS: 93
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 330
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-892-949-38

Query Match 100.0%; Score 1263; DB 10; Length 330;
Best Local Similarity 100.0%; Pred. No. 1.6e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218
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```
Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 15
US-10-047-542-20
; Sequence 20, Application US/10047542
; Publication No. US20020168367A1
; GENERAL INFORMATION:
;  APPLICANT: LARRICK, JAMES W.
;  APPLICANT:  WYCOFF, KEITH L.
;  TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING VIRAL
;  TITLE OF INVENTION:  AND BACTERIAL DISEASES
;  FILE REFERENCE: 030905.0004.CIP1
;  CURRENT APPLICATION NUMBER: US/10/047,542
;  CURRENT FILING DATE:  2001-10-26
;  PRIOR APPLICATION NUMBER: PCT/US01/13932
;  PRIOR FILING DATE: 2001-04-28
;  PRIOR APPLICATION NUMBER: 60/200,298
;  PRIOR FILING DATE: 2000-04-28
;  NUMBER OF SEQ ID NOS: 101
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 20
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-047-542-20

  Query Match             100.0%;  Score 1263;  DB 13;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 16
US-10-269-805-68
; Sequence 68, Application US/10269805
; Publication No. US20030124129A1
; GENERAL INFORMATION:
;  APPLICANT: OLINER, JONATHAN D.
;  TITLE OF INVENTION: ANGIOPOIETIN-2 SPECIFIC BINDING AGENTS
;  FILE REFERENCE: A-722
;  CURRENT APPLICATION NUMBER: US/10/269,805
;  CURRENT FILING DATE:  2002-10-10
;  PRIOR APPLICATION NUMBER: US 60/328,604
;  PRIOR FILING DATE: 2001-10-11
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 68
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-269-805-68

  Query Match             100.0%;  Score 1263;  DB 14;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 17
US-10-310-719-8
; Sequence 8, Application US/10310719
; Publication No. US20030166163A1
; GENERAL INFORMATION:
;  APPLICANT: Gillies, Stephen
;  TITLE OF INVENTION: Immunocytokines With Modulated Selectivity
;  FILE REFERENCE: LEX-020
;  CURRENT APPLICATION NUMBER: US/10/310,719
;  CURRENT FILING DATE:  2002-12-04
;  PRIOR APPLICATION NUMBER: 60/337,113
;  PRIOR FILING DATE: 2001-12-04
;  PRIOR APPLICATION NUMBER: 60/371,966
;  PRIOR FILING DATE: 2002-04-12
;  NUMBER OF SEQ ID NOS: 37
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc
;   LOCATION: (1)..(330)
;   OTHER INFORMATION: IgG1 constant region
US-10-310-719-8

  Query Match             100.0%;  Score 1263;  DB 14;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 18
US-10-112-582-1
; Sequence 1, Application US/10112582
```

```
; Publication No. US20030166877A1
; GENERAL INFORMATION:
;  APPLICANT: Gillies, Stephen
;  TITLE OF INVENTION: Reducing the Immunogenicity of Fusion Proteins
;  FILE REFERENCE: LEX-017
;  CURRENT APPLICATION NUMBER: US/10/112,582
;  CURRENT FILING DATE:  2002-03-29
;  PRIOR APPLICATION NUMBER: US 60/280,625
;  PRIOR FILING DATE: 2001-03-30
;  NUMBER OF SEQ ID NOS: 59
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   OTHER INFORMATION: human Ig gamma heavy chain C region
US-10-112-582-1

  Query Match             100.0%;  Score 1263;  DB 14;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 19
US-10-320-231A-81
; Sequence 81, Application US/10320231A
; Publication No. US20030194405A1
; GENERAL INFORMATION:
;  APPLICANT: Neben, Steven
;  APPLICANT:  Takeuchi, Toshihiko
;  APPLICANT:  Tomkinson, Adrian
;  TITLE OF INVENTION: Antibody Inhibiting Stem Cell Factor Activity And Use For
;  TITLE OF INVENTION:  Treatment Of Asthma
;  FILE REFERENCE: 7430*163
;  CURRENT APPLICATION NUMBER: US/10/320,231A
;  CURRENT FILING DATE:  2002-12-19
;  PRIOR APPLICATION NUMBER: US 60/342,174
;  PRIOR FILING DATE: 2001-12-17
;  NUMBER OF SEQ ID NOS: 85
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 81
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-320-231A-81

  Query Match             100.0%;  Score 1263;  DB 14;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 20
US-10-383-902A-6
; Sequence 6, Application US/10383902A
; Publication No. US20030224408A1
; GENERAL INFORMATION:
;  APPLICANT: Hoogenboom, Henricus Renerus Jacobus Mattheus
;  APPLICANT:  Mullberg, Jurgen
;  APPLICANT:  Ladner, Robert C.
;  TITLE OF INVENTION: LIGAND SCREENING AND DISCOVERY
;  FILE REFERENCE: 10280-042001
;  CURRENT APPLICATION NUMBER: US/10/383,902A
;  CURRENT FILING DATE:  2003-03-07
;  PRIOR APPLICATION NUMBER: US 60/362,403
;  PRIOR FILING DATE: 2002-03-07
;  NUMBER OF SEQ ID NOS: 58
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 6
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetically generated plasmid sequence
US-10-383-902A-6

  Query Match             100.0%;  Score 1263;  DB 15;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 21
US-10-408-901-2
; Sequence 2, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
;  APPLICANT: Boyle, William
;  APPLICANT:  Huang, Haichun
;  APPLICANT:  Elliot, Robin
;  APPLICANT:  Sullivan, John
;  APPLICANT:  Medlock, Eugene
;  APPLICANT:  Martin, Francis
;  TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
;  TITLE OF INVENTION:  Inhibitors
;  FILE REFERENCE: MBHB 01-1145-A
;  CURRENT APPLICATION NUMBER: US/10/408,901
;  CURRENT FILING DATE:  2003-04-07
```

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;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-408-901-2

  Query Match            100.0%;  Score 1263;  DB 15;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 22
US-10-420-034A-15
; Sequence 15, Application US/10420034A
; Publication No. US20040029228A1
; GENERAL INFORMATION:
;  APPLICANT: Presnell, Scott R.
;  APPLICANT:  Xu, Wenfeng
;  APPLICANT:  No. US20040029228A1ak, Julia E.
;  APPLICANT:  Whitmore, Theodore E.
;  APPLICANT:  Grant, Francis J.
;  APPLICANT:  Kindsvogel, Wayne R.
;  APPLICANT:  Klucher, Kevin M.
;  TITLE OF INVENTION: CYTOKINE RECEPTOR
;  FILE REFERENCE: 02-10
;  CURRENT APPLICATION NUMBER: US/10/420,034A
;  CURRENT FILING DATE:  2003-04-18
;  PRIOR APPLICATION NUMBER: 60/373,813
;  PRIOR FILING DATE: 2002-04-19
;  NUMBER OF SEQ ID NOS: 69
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 15
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-420-034A-15

  Query Match            100.0%;  Score 1263;  DB 15;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 23
US-10-257-907-5
; Sequence 5, Application US/10257907
; Publication No. US20040043022A1
; GENERAL INFORMATION:
;  APPLICANT: Heuer, Josef
;  APPLICANT:  Liu, Jinqi
;  APPLICANT:  Na, Songqing
;  APPLICANT:  Song, Ho Yeong
;  APPLICANT:  Yang, Derek Di
;  TITLE OF INVENTION: TREATING T-CELL MEDIATED DISEASES BY MODULATING DR6 ACTIVITY
;  FILE REFERENCE: X-13992
;  CURRENT APPLICATION NUMBER: US/10/257,907
;  CURRENT FILING DATE:  2002-10-16
;  NUMBER OF SEQ ID NOS: 5
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-257-907-5

  Query Match            100.0%;  Score 1263;  DB 15;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 24
US-10-656-769-2
; Sequence 2, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:
;  APPLICANT: Varnum, Brian
;  APPLICANT:  Witte, Alison
;  APPLICANT:  Vezina, Chris
;  APPLICANT:  Wong, Lu Min
;  APPLICANT:  Qian, Xueming
;  TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
;  FILE REFERENCE: 01,1554
;  CURRENT APPLICATION NUMBER: US/10/656,769
;  CURRENT FILING DATE:  2003-09-05
;  NUMBER OF SEQ ID NOS: 79
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-656-769-2

  Query Match            100.0%;  Score 1263;  DB 15;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
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              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 25
US-10-679-620-58
; Sequence 58, Application US/10679620
; Publication No. US20040110930A1
; GENERAL INFORMATION:
;  APPLICANT: Large Scale Biology
;  APPLICANT:  Reinl, Stephen J.
;  APPLICANT:  Edwards, Patricia C.
;  TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
;  FILE REFERENCE: 34150-004A
;  CURRENT APPLICATION NUMBER: US/10/679,620
;  CURRENT FILING DATE:  2003-10-03
;  PRIOR APPLICATION NUMBER: 60/415,940
;  PRIOR FILING DATE: 2002-10-03
;  NUMBER OF SEQ ID NOS: 122
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 58
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: PhCHTOPO, see Example 15
US-10-679-620-58

  Query Match            100.0%;  Score 1263;  DB 16;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 26
US-10-772-531-38
; Sequence 38, Application US/10772531
; Publication No. US20040142422A1
; GENERAL INFORMATION:
;  APPLICANT: Sprecher, Cindy A.
;  APPLICANT:  Presnell, Scott R.
;  APPLICANT:  Gao, Zeren
;  APPLICANT:  Whitmore, Theodore E.
;  APPLICANT:  Kuijper, Joseph L.
;  APPLICANT:  Maurer, Mark F.
;  TITLE OF INVENTION: CYTOKINE RECEPTOR ZCYTOR17
;  FILE REFERENCE: 00-42
;  CURRENT APPLICATION NUMBER: US/10/772,531
;  CURRENT FILING DATE:  2004-02-05
;  PRIOR APPLICATION NUMBER: US/09/892,949
;  PRIOR FILING DATE: 2001-06-26
;  PRIOR APPLICATION NUMBER: US 60/214,282
;  PRIOR FILING DATE: 2000-06-26
;  PRIOR APPLICATION NUMBER: US 60/214,955
;  PRIOR FILING DATE: 2000-06-29
;  PRIOR APPLICATION NUMBER: US 60/267,963
;  PRIOR FILING DATE: 2001-08-02
;  NUMBER OF SEQ ID NOS: 93
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-772-531-38

  Query Match            100.0%;  Score 1263;  DB 16;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 27
US-10-479-326-1
; Sequence 1, Application US/10479326
; Publication No. US20040198961A1
; GENERAL INFORMATION:
;  APPLICANT: Tanox, INC.
;  APPLICANT:  AN, Ling-Ling
;  APPLICANT:  WU, Herren
;  APPLICANT:  FUNG, Michael
;  TITLE OF INVENTION: Fce FUSION PROTEINS FOR TREATMENT OF ALLERGY AND ASTHMA
;  FILE REFERENCE: TNX01-02PCT
;  CURRENT APPLICATION NUMBER: US/10/479,326
;  CURRENT FILING DATE:  2003-12-02
;  PRIOR APPLICATION NUMBER: US60/298,710
;  PRIOR FILING DATE: 2001-06-15
;  NUMBER OF SEQ ID NOS: 2
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: PEPTIDE
;   LOCATION: (1)..(330)
US-10-479-326-1

  Query Match            100.0%;  Score 1263;  DB 16;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
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Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158
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Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 28
US-10-684-957-2
; Sequence 2, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
;  APPLICANT: Amgen, Inc.
;  APPLICANT:  Welcher, Andrew
;  APPLICANT:  Chute, Hilary
;  APPLICANT:  Li, Luke
;  APPLICANT:  Huang, Haichun
;  TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gam
;  TITLE OF INVENTION:  Pathway Inhibitors
;  FILE REFERENCE: 01-1635-B
;  CURRENT APPLICATION NUMBER: US/10/684,957
;  CURRENT FILING DATE:  2003-10-14
;  PRIOR APPLICATION NUMBER: US 60/419,057
;  PRIOR FILING DATE: 2002-10-16
;  PRIOR APPLICATION NUMBER: US 60/479,241
;  PRIOR FILING DATE: 2003-06-17
;  NUMBER OF SEQ ID NOS: 57
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-684-957-2

  Query Match           100.0%;  Score 1263;  DB 16;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 29
US-10-886-838-6
; Sequence 6, Application US/10886838
; Publication No. US20050008642A1
; GENERAL INFORMATION:
;  APPLICANT: Hoffmann-La Roche Inc.
;  TITLE OF INVENTION: Antibodies against insulin-like growth factor I receptor and uses
;  TITLE OF INVENTION:  thereof
;  FILE REFERENCE: 21695
;  CURRENT APPLICATION NUMBER: US/10/886,838
;  CURRENT FILING DATE:  2004-07-08
;  PRIOR APPLICATION NUMBER: EP 03015526
;  PRIOR FILING DATE: 2003-07-10
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 6
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-886-838-6

  Query Match           100.0%;  Score 1263;  DB 17;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 30
US-10-822-300-3
; Sequence 3, Application US/10822300
; Publication No. US20050014934A1
; GENERAL INFORMATION:
;  APPLICANT: Hinton, et al.
;  TITLE OF INVENTION: ALTERATION OF FcRn BINDING AFFINITIES OR SERUM HALF-LIVES OF
;  TITLE OF INVENTION:  ANTIBODIES BY MUTAGENESIS
;  FILE REFERENCE: 05882.0039.CPUS01
;  CURRENT APPLICATION NUMBER: US/10/822,300
;  CURRENT FILING DATE:  2004-04-09
;  NUMBER OF SEQ ID NOS: 146
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-822-300-3

  Query Match           100.0%;  Score 1263;  DB 17;  Length 330;
  Best Local Similarity  100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 31
US-10-822-300-7
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; Sequence 7, Application US/10822300
; Publication No. US20050014934A1
; GENERAL INFORMATION:
;  APPLICANT: Hinton, et al.
;  TITLE OF INVENTION: ALTERATION OF FcRn BINDING AFFINITIES OR SERUM HALF-LIVES OF
;  TITLE OF INVENTION:  ANTIBODIES BY MUTAGENESIS
;  FILE REFERENCE: 05882.0039.CPUS01
;  CURRENT APPLICATION NUMBER: US/10/822,300
;  CURRENT FILING DATE:  2004-04-09
;  NUMBER OF SEQ ID NOS: 146
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: artificial
;   FEATURE:
;   OTHER INFORMATION: Humanized antibody
US-10-822-300-7

  Query Match           100.0%;  Score 1263;  DB 17;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 158

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 218

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 278

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 330


RESULT 32
US-09-761-413-2
; Sequence 2, Application US/09761413
; Publication No. US20010046490A1
; GENERAL INFORMATION:
;  APPLICANT: Tao, Weng
;  APPLICANT:  Wong, Shou
;  APPLICANT:  Hickey, William F
;  APPLICANT:  Hammang, Joseph P.
;  APPLICANT:  Baetge, E. Edward
;  TITLE OF INVENTION: CELL SURFACE-INDUCED MACROPHAGE ACTIVATION
;  FILE REFERENCE: 17810-043
;  CURRENT APPLICATION NUMBER: US/09/761,413
;  CURRENT FILING DATE:  2001-01-16
;  PRIOR APPLICATION NUMBER: US/09/178,869
;  PRIOR FILING DATE: 1998-10-26
;  NUMBER OF SEQ ID NOS: 14
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
;   LENGTH: 331
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-761-413-2

  Query Match           100.0%;  Score 1263;  DB 9;  Length 331;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        100 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 159

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        160 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 219

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 279

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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Db        280 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 331


RESULT 33
US-10-341-836-2
; Sequence 2, Application US/10341836
; Publication No. US20030120059A1
; GENERAL INFORMATION:
;  APPLICANT: Tao, Weng
;  APPLICANT:  Wong, Shou
;  APPLICANT:  Hickey, William F
;  APPLICANT:  Hammang, Joseph P
;  APPLICANT:  Baetge, Edward E
;  TITLE OF INVENTION: Cell Surface Molecule-Induced Macrophage Activation
;  FILE REFERENCE: 19141-543 DIV1CON2
;  CURRENT APPLICATION NUMBER: US/10/341,836
;  CURRENT FILING DATE:  2003-02-21
;  PRIOR APPLICATION NUMBER: 09/761,413
;  PRIOR FILING DATE: 2001-01-16
;  PRIOR APPLICATION NUMBER: 09/562,544
;  PRIOR FILING DATE: 2000-05-02
;  PRIOR APPLICATION NUMBER: 09/178,869
;  PRIOR FILING DATE: 1998-10-26
;  NUMBER OF SEQ ID NOS: 14
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
;   LENGTH: 331
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-341-836-2

  Query Match           100.0%;  Score 1263;  DB 14;  Length 331;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        100 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 159

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        160 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 219

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 279

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 331


RESULT 34
US-09-990-586-98
; Sequence 98, Application US/09990586
; Publication No. US20030109680A1
; GENERAL INFORMATION:
;  APPLICANT: JIAO, JIN-AN
;  APPLICANT:  WONG, HING C.
;  TITLE OF INVENTION: ANTIBODIES FOR INHIBITING BLOOD COAGULATION AND METHODS
;  TITLE OF INVENTION:  OF USE THEREOF
;  FILE REFERENCE: 71758/46943-CIP2
;  CURRENT APPLICATION NUMBER: US/09/990,586
;  CURRENT FILING DATE:  2001-11-21
```

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;  PRIOR APPLICATION NUMBER: 09/293,854
;  PRIOR FILING DATE: 1999-04-16
;  NUMBER OF SEQ ID NOS: 102
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 98
;   LENGTH: 332
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-990-586-98

  Query Match             100.0%;  Score 1263;  DB 10;  Length 332;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        101 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 160

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 220

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 280

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 332


RESULT 35
US-10-310-113-167
; Sequence 167, Application US/10310113
; Publication No. US20030176664A1
; GENERAL INFORMATION:
;  APPLICANT: JIAO, JIN-AN
;  APPLICANT:  WONG, HING C.
;  APPLICANT:  NIEVES, ESPERANZA LILIANA
;  APPLICANT:  MOSQUERA, LUIS A.
;  TITLE OF INVENTION: USE OF ANTI-TISSUE FACTOR ANTIBODIES FOR TREATING
;  TITLE OF INVENTION:  THROMBOSES
;  FILE REFERENCE: 58122(71758)
;  CURRENT APPLICATION NUMBER: US/10/310,113
;  CURRENT FILING DATE:  2002-12-04
;  PRIOR APPLICATION NUMBER: 09/990,586
;  PRIOR FILING DATE: 2001-11-21
;  PRIOR APPLICATION NUMBER: 60/343,306
;  PRIOR FILING DATE: 2001-10-29
;  PRIOR APPLICATION NUMBER: 09/293,854
;  PRIOR FILING DATE: 1999-04-16
;  PRIOR APPLICATION NUMBER: 08/814,806
;  PRIOR FILING DATE: 1997-03-10
;  NUMBER OF SEQ ID NOS: 169
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 167
;   LENGTH: 332
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-310-113-167

  Query Match             100.0%;  Score 1263;  DB 14;  Length 332;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        101 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 160

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 220

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 280

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 332


RESULT 36
US-10-230-880-98
; Sequence 98, Application US/10230880
; Publication No. US20030190705A1
; GENERAL INFORMATION:
;  APPLICANT: WONG, HING C.
;  APPLICANT:  STINSON, JEFFREY L.
;  APPLICANT:  MOSQUERA, LUIS A.
;  TITLE OF INVENTION: METHOD OF HUMANIZING IMMUNE SYSTEM MOLECULES
;  FILE REFERENCE: 71758/58066
;  CURRENT APPLICATION NUMBER: US/10/230,880
;  CURRENT FILING DATE:  2002-12-23
;  PRIOR APPLICATION NUMBER: 09/990,586
;  PRIOR FILING DATE: 2001-11-21
;  PRIOR APPLICATION NUMBER: 60/343,306
;  PRIOR FILING DATE: 2001-10-29
;  PRIOR APPLICATION NUMBER: 09/293,854
;  PRIOR FILING DATE: 1999-04-16
;  NUMBER OF SEQ ID NOS: 174
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 98
;   LENGTH: 332
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-230-880-98

  Query Match             100.0%;  Score 1263;  DB 14;  Length 332;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        101 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 160

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 220

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 280

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 332


RESULT 37
US-10-272-899A-8
; Sequence 8, Application US/10272899A
; Publication No. US20040033561A1
; GENERAL INFORMATION:
;  APPLICANT: O'Keefe, Theresa L.
;  APPLICANT:  Healy, Judith Jacques
;  APPLICANT:  Newman, Walter
;  APPLICANT:  Ponath, Paul
;  APPLICANT:  Bruce Keyt
;  TITLE OF INVENTION: IMMUNOGLOBULIN DNA CASSETTE MOLECULES,
;  TITLE OF INVENTION:  MONOBODY CONSTRUCTS, METHODS OF PRODUCTION, AND METHODS OF
;  TITLE OF INVENTION:  USE THEREFOR
;  FILE REFERENCE: MPI01-244P2RM
;  CURRENT APPLICATION NUMBER: US/10/272,899A
;  CURRENT FILING DATE:  2002-10-17
;  PRIOR APPLICATION NUMBER: 60/350,166
```

```
;  PRIOR FILING DATE: 2001-10-19
;  PRIOR APPLICATION NUMBER: 60/392,364
;  PRIOR FILING DATE: 2002-06-26
;  NUMBER OF SEQ ID NOS: 110
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 8
;   LENGTH: 333
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: human IgG1-WT protein
US-10-272-899A-8

  Query Match             100.0%;  Score 1263;  DB 15;  Length 333;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        102 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 161

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        162 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 221

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 281

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 333


RESULT 38
US-10-272-899A-72
; Sequence 72, Application US/10272899A
; Publication No. US20040033561A1
; GENERAL INFORMATION:
;  APPLICANT: O'Keefe, Theresa L.
;  APPLICANT:  Healy, Judith Jacques
;  APPLICANT:  Newman, Walter
;  APPLICANT:  Ponath, Paul
;  APPLICANT:  Bruce Keyt
;  TITLE OF INVENTION: IMMUNOGLOBULIN DNA CASSETTE MOLECULES,
;  TITLE OF INVENTION:  MONOBODY CONSTRUCTS, METHODS OF PRODUCTION, AND METHODS OF
;  TITLE OF INVENTION:  USE THEREFOR
;  FILE REFERENCE: MPI01-244P2RM
;  CURRENT APPLICATION NUMBER: US/10/272,899A
;  CURRENT FILING DATE:  2002-10-17
;  PRIOR APPLICATION NUMBER: 60/350,166
;  PRIOR FILING DATE: 2001-10-19
;  PRIOR APPLICATION NUMBER: 60/392,364
;  PRIOR FILING DATE: 2002-06-26
;  NUMBER OF SEQ ID NOS: 110
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 72
;   LENGTH: 356
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: immunoglobulin cassette protein sequence
;   OTHER INFORMATION: Leader-HuWT_55
US-10-272-899A-72

  Query Match             100.0%;  Score 1263;  DB 15;  Length 356;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        125 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 184

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        185 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 244

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 304

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 356


RESULT 39
US-10-233-150-5
; Sequence 5, Application US/10233150
; Publication No. US20030108965A1
; GENERAL INFORMATION:
;  APPLICANT: Schummer, Michel
;  APPLICANT:  Hellstrom, Ingegerd
;  APPLICANT:  Hellstrom, Karl Erik
;  APPLICANT:  Ledbetter, Jeffrey A.
;  APPLICANT:  Hayden-Ledbetter, Martha
;  TITLE OF INVENTION: DIAGNOSIS OF CARCINOMAS
;  FILE REFERENCE: 730033.412
;  CURRENT APPLICATION NUMBER: US/10/233,150
;  CURRENT FILING DATE:  2002-09-09
;  NUMBER OF SEQ ID NOS: 20
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 358
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-233-150-5

  Query Match             100.0%;  Score 1263;  DB 14;  Length 358;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        127 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 186

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        187 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 246

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 306

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 358


RESULT 40
US-09-949-713-11
; Sequence 11, Application US/09949713
; Patent No. US20020044944A1
; GENERAL INFORMATION:
;  APPLICANT: NAKAMURA, No. US20020044944A1io
;  APPLICANT:  NAGATA, Shigekazu
;  TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE
;  FILE REFERENCE: 1110-207P
;  CURRENT APPLICATION NUMBER: US/09/949,713
;  CURRENT FILING DATE:  2001-09-12
;  PRIOR APPLICATION NUMBER: US/09/180,100
;  PRIOR FILING DATE: 1998-11-02
;  PRIOR APPLICATION NUMBER: PCT/JP97/01502
;  PRIOR FILING DATE: 1997-05-01
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: PatentIn Ver. 2.0
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; SEQ ID NO 11
;   LENGTH: 360
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-949-713-11

  Query Match            100.0%;  Score 1263;  DB 9;  Length 360;
  Best Local Similarity  100.0%;  Pred. No. 1.7e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        129 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 188

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        189 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 248

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 308

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 360


RESULT 41
US-10-452-646-9
; Sequence 9, Application US/10452646
; Publication No. US20040018593A1
; GENERAL INFORMATION:
;  APPLICANT: Carton, Jill M.
;  APPLICANT:  Staquet, Kimberly C.
;  APPLICANT:  Scallon, Bernard J.
;  APPLICANT:  Jill, Giles-Komar
;  TITLE OF INVENTION: ANTI-RELP FUSION ANTIBODIES, COMPOSITIONS, METHODS AND USES
;  FILE REFERENCE: CEN0296 NP
;  CURRENT APPLICATION NUMBER: US/10/452,646
;  CURRENT FILING DATE:  2003-06-02
;  PRIOR APPLICATION NUMBER: US 60/385,305
;  PRIOR FILING DATE: 2002-06-03
;  NUMBER OF SEQ ID NOS: 43
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
;   LENGTH: 367
;   TYPE: PRT
;   ORGANISM: homo sapiens
US-10-452-646-9

  Query Match            100.0%;  Score 1263;  DB 15;  Length 367;
  Best Local Similarity  100.0%;  Pred. No. 1.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        136 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 195

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        196 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 255

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        256 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 315

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        316 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 367


RESULT 42
US-10-157-408-7
; Sequence 7, Application US/10157408
; Publication No. US20030104535A1
;  GENERAL INFORMATION:
;       APPLICANT: Capon, Daniel J.
;                  Gregory, Timothy J.
;       TITLE OF INVENTION: Adheson Variants
;       NUMBER OF SEQUENCES: 25
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Genentech, Inc.
;            STREET: 460 Point San Bruno Blvd
;            CITY: South San Francisco
;            STATE: California
;            COUNTRY: USA
;            ZIP: 94080
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: patin (Genentech)
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/10/157,408
;            FILING DATE: 28-May-2002
;            CLASSIFICATION: 435
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/08/457,918
;            FILING DATE: 1-JUN-1995
;            APPLICATION NUMBER: 08/236311
;            FILING DATE: 02-MAY-1994
;            APPLICATION NUMBER: 07/936190
;            FILING DATE: 26-AUG-1992
;            APPLICATION NUMBER: 07/842777
;            FILING DATE: 18-FEB-1992
;            APPLICATION NUMBER: 07/250785
;            FILING DATE: 28-SEP-1988
;            APPLICATION NUMBER: 07/104329
;            FILING DATE: 02-OCT-1987
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Kubinec, Jeffrey S.
;            REGISTRATION NUMBER: 36,575
;            REFERENCE/DOCKET NUMBER: P0444P1C3
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415/225-8228
;            TELEFAX: 415/952-9881
;            TELEX: 910/371-7168
;  INFORMATION FOR SEQ ID NO: 7:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 371 amino acids
;            TYPE: amino acid
;            TOPOLOGY: linear
;       SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-157-408-7

  Query Match            100.0%;  Score 1263;  DB 14;  Length 371;
  Best Local Similarity  100.0%;  Pred. No. 1.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 199

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 319

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        320 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 371
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RESULT 43
US-10-097-044A-7
; Sequence 7, Application US/10097044A
; Publication No. US20030143220A1
;   GENERAL INFORMATION:
;        APPLICANT: Capon, Daniel J.
;                   Gregory, Timothy J.
;        TITLE OF INVENTION: Adheson Variants
;        NUMBER OF SEQUENCES: 25
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Genentech, Inc.
;             STREET: 460 Point San Bruno Blvd
;             CITY: South San Francisco
;             STATE: California
;             COUNTRY: USA
;             ZIP: 94080
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: patin (Genentech)
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/097,044A
;             FILING DATE: 28-May-2002
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/08/457,918
;             FILING DATE: 1-JUN-1995
;             APPLICATION NUMBER: 08/236311
;             FILING DATE: 02-MAY-1994
;             APPLICATION NUMBER: 07/936190
;             FILING DATE: 26-AUG-1992
;             APPLICATION NUMBER: 07/842777
;             FILING DATE: 18-FEB-1992
;             APPLICATION NUMBER: 07/250785
;             FILING DATE: 28-SEP-1988
;             APPLICATION NUMBER: 07/104329
;             FILING DATE: 02-OCT-1987
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Kubinec, Jeffrey S.
;             REGISTRATION NUMBER: 36,575
;             REFERENCE/DOCKET NUMBER: P0444P1C3
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 415/225-8228
;             TELEFAX: 415/952-9881
;             TELEX: 910/371-7168
;   INFORMATION FOR SEQ ID NO: 7:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 371 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-097-044A-7

  Query Match             100.0%;  Score 1263;  DB 14;  Length 371;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 199

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 319

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        320 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 371
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RESULT 44
US-10-769-247-7
; Sequence 7, Application US/10769247
; Publication No. US20040197809A1
;   GENERAL INFORMATION:
;        APPLICANT: Capon, Daniel J.
;                   Gregory, Timothy J.
;        TITLE OF INVENTION: Adheson Variants
;        NUMBER OF SEQUENCES: 25
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Genentech, Inc.
;             STREET: 460 Point San Bruno Blvd
;             CITY: South San Francisco
;             STATE: California
;             COUNTRY: USA
;             ZIP: 94080
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: patin (Genentech)
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/769,247
;             FILING DATE: 30-Jan-2004
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/08/457,918
;             FILING DATE: 1-JUN-1995
;             APPLICATION NUMBER: 08/236311
;             FILING DATE: 02-MAY-1994
;             APPLICATION NUMBER: 07/936190
;             FILING DATE: 26-AUG-1992
;             APPLICATION NUMBER: 07/842777
;             FILING DATE: 18-FEB-1992
;             APPLICATION NUMBER: 07/250785
;             FILING DATE: 28-SEP-1988
;             APPLICATION NUMBER: 07/104329
;             FILING DATE: 02-OCT-1987
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Kubinec, Jeffrey S.
;             REGISTRATION NUMBER: 36,575
;             REFERENCE/DOCKET NUMBER: P0444P1C3
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 415/225-8228
;             TELEFAX: 415/952-9881
;             TELEX: 910/371-7168
;   INFORMATION FOR SEQ ID NO: 7:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 371 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-769-247-7

  Query Match             100.0%;  Score 1263;  DB 16;  Length 371;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 199

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        200 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 259

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        260 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 319

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        320 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 371


RESULT 45
US-09-949-713-22
; Sequence 22, Application US/09949713
; Patent No. US20020044944A1
; GENERAL INFORMATION:
;  APPLICANT: NAKAMURA, No. US20020044944A1io
;  APPLICANT:  NAGATA, Shigekazu
;  TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE
;  FILE REFERENCE: 1110-207P
;  CURRENT APPLICATION NUMBER: US/09/949,713
;  CURRENT FILING DATE:  2001-09-12
;  PRIOR APPLICATION NUMBER: US/09/180,100
;  PRIOR FILING DATE: 1998-11-02
;  PRIOR APPLICATION NUMBER: PCT/JP97/01502
;  PRIOR FILING DATE: 1997-05-01
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
;   LENGTH: 376
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-949-713-22

  Query Match           100.0%;  Score 1263;  DB 9;  Length 376;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        145 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 204

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        205 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 264

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        265 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 324

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        325 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 376


RESULT 46
US-10-084-139-10
; Sequence 10, Application US/10084139
; Publication No. US20030109416A1
; GENERAL INFORMATION:
;  APPLICANT: NAGATA, Shigekazu
;  APPLICANT:  YATOMI, Takehiro
;  APPLICANT:  SUDA, Takashi
;  TITLE OF INVENTION: PROPHYLACTIC/THERAPEUTIC AGENT
;  FILE REFERENCE: 1110-0307P
;  CURRENT APPLICATION NUMBER: US/10/084,139
;  CURRENT FILING DATE:  2002-12-09
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
;   LENGTH: 376
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-084-139-10

  Query Match           100.0%;  Score 1263;  DB 14;  Length 376;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        145 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 204

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        205 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 264

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        265 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 324

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        325 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 376


RESULT 47
US-10-363-427-16
; Sequence 16, Application US/10363427
; Publication No. US20030195338A1
; GENERAL INFORMATION:
;  APPLICANT: MeDexGen Inc.
;  APPLICANT:  CHUNG, Yong Hoon
;  APPLICANT:  HAN, Ji Woong
;  APPLICANT:  LEE, Hye Ja
;  APPLICANT:  CHOI, Eun Yong
;  APPLICANT:  KIM, Jin Mi
;  APPLICANT:  YIM, Soo Bin
;  TITLE OF INVENTION: Concatametric Immunoadhesion
;  FILE REFERENCE:
;  CURRENT APPLICATION NUMBER: US/10/363,427
;  CURRENT FILING DATE:  2003-02-28
;  NUMBER OF SEQ ID NOS: 52
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 16
;   LENGTH: 377
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-363-427-16

  Query Match           100.0%;  Score 1263;  DB 14;  Length 377;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        146 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 205

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 265

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 325

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 377


RESULT 48
US-10-679-999-9
; Sequence 9, Application US/10679999
; Publication No. US20040067520A1
;  GENERAL INFORMATION:
;       APPLICANT: Mann, Michael B.
;                  Hecht, Randy I.
;       TITLE OF INVENTION: OB FUSION PROTEIN COMPOSITIONS AND
;                           METHODS
;       NUMBER OF SEQUENCES: 18
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Amgen Inc.
```

```
;             STREET: 1840 DeHavilland Drive
;             CITY: Thousand Oaks
;             STATE: CA
;             COUNTRY: USA
;             ZIP: 91320-1789
;       COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;       CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/679,999
;             FILING DATE: 06-Oct-2003
;             CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/09/568,528
;             FILING DATE: 09-May-2000
;             APPLICATION NUMBER: 09/267,517
;             FILING DATE: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;             NAME: Knight, Matthew W.
;             REGISTRATION NUMBER: 36,846
;             REFERENCE/DOCKET NUMBER: A-416
;   INFORMATION FOR SEQ ID NO: 9:
;       SEQUENCE CHARACTERISTICS:
;             LENGTH: 379 amino acids
;             TYPE: amino acid
;             STRANDEDNESS: unknown
;             TOPOLOGY: unknown
;       MOLECULE TYPE: protein
;       FEATURE:
;             NAME/KEY:  Protein
;             LOCATION:  1
;             OTHER INFORMATION:  /note= "Met (ATG) starts at -1"
;       SEQUENCE DESCRIPTION: SEQ ID NO: 9:
US-10-679-999-9

  Query Match            100.0%;  Score 1263;  DB 15;  Length 379;
  Best Local Similarity  100.0%;  Pred. No. 1.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          2 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 61

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 121

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 181

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 233


RESULT 49
US-10-362-591-4
; Sequence 4, Application US/10362591
; Publication No. US20040072749A1
; GENERAL INFORMATION:
;  APPLICANT: ZOCHER, MARCEL
;  APPLICANT:  BAUERLE, PATRICK
;  APPLICANT:  DREIER, TORSTEN
;  TITLE OF INVENTION: COMPOSITION FOR THE ELIMINATION OF AUTOREACTIVE B-CELLS
;  FILE REFERENCE: 029976-0110
;  CURRENT APPLICATION NUMBER: US/10/362,591
;  CURRENT FILING DATE:  2003-07-21
;  PRIOR APPLICATION NUMBER: PCT/EP01/09714
;  PRIOR FILING DATE: 2001-08-22
;  PRIOR APPLICATION NUMBER: EP 00117354.1
;  PRIOR FILING DATE: 2000-08-22
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 388
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-362-591-4

  Query Match            100.0%;  Score 1263;  DB 15;  Length 388;
  Best Local Similarity  100.0%;  Pred. No. 1.9e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        157 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 216

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        217 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 276

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        277 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 336

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        337 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 388


RESULT 50
US-10-193-616-14
; Sequence 14, Application US/10193616
; Publication No. US20030096355A1
; GENERAL INFORMATION:
;  APPLICANT: Zhang, Ke
;  TITLE OF INVENTION: Isolation, Identification, and Characterization of
;  TITLE OF INVENTION:  ymkz5, a novel
;  TITLE OF INVENTION:  member of the TNF-Receptor Supergene Family
;  FILE REFERENCE: 01017/35551A
;  CURRENT APPLICATION NUMBER: US/10/193,616
;  CURRENT FILING DATE:  2002-07-11
;  PRIOR APPLICATION NUMBER: US/09/611,989
;  PRIOR FILING DATE: 2000-07-07
;  PRIOR APPLICATION NUMBER: US 60/143,137
;  PRIOR FILING DATE: 1999-07-07
;  NUMBER OF SEQ ID NOS: 15
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
;   LENGTH: 396
;   TYPE: PRT
;   ORGANISM: Mus musculus
;   FEATURE:
;   OTHER INFORMATION: ymkz5-Fc fusion protein
US-10-193-616-14

  Query Match            100.0%;  Score 1263;  DB 14;  Length 396;
  Best Local Similarity  100.0%;  Pred. No. 1.9e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        165 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 224

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        225 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 284

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        285 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 344

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        345 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 396


RESULT 51
US-09-948-018-16
; Sequence 16, Application US/09948018
; Patent No. US20020150977A1
; GENERAL INFORMATION:
;  APPLICANT: Theill et al
;  TITLE OF INVENTION: TNF RECEPTOR-LIKE MOLECULES AND USES THEREOF
;  FILE REFERENCE: 01017/37677
;  CURRENT APPLICATION NUMBER: US/09/948,018
;  CURRENT FILING DATE:  2001-09-05
;  PRIOR APPLICATION NUMBER: US 60/230,191
;  PRIOR FILING DATE: 2000-09-05
;  NUMBER OF SEQ ID NOS: 45
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 16
;   LENGTH: 404
;   TYPE: PRT
;   ORGANISM: Mus musculus
US-09-948-018-16

  Query Match             100.0%;  Score 1263;  DB 9;  Length 404;
  Best Local Similarity   100.0%;  Pred. No. 2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        162 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 221

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 281

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 341

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        342 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 393


RESULT 52
US-10-363-427-14
; Sequence 14, Application US/10363427
; Publication No. US20030195338A1
; GENERAL INFORMATION:
;  APPLICANT: MeDexGen Inc.
;  APPLICANT:  CHUNG, Yong Hoon
;  APPLICANT:  HAN, Ji Woong
;  APPLICANT:  LEE, Hye Ja
;  APPLICANT:  CHOI, Eun Yong
;  APPLICANT:  KIM, Jin Mi
;  APPLICANT:  YIM, Soo Bin
;  TITLE OF INVENTION: Concatametric Immunoadhesion
;  FILE REFERENCE:
;  CURRENT APPLICATION NUMBER: US/10/363,427
;  CURRENT FILING DATE:  2003-02-28
;  NUMBER OF SEQ ID NOS: 52
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 14
;   LENGTH: 437
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-363-427-14

  Query Match             100.0%;  Score 1263;  DB 14;  Length 437;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 265

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 325

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 385

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 437


RESULT 53
US-10-226-435A-12
; Sequence 12, Application US/10226435A
; Publication No. US20040043418A1
; GENERAL INFORMATION:
;  APPLICANT: ELI LILLY AND COMPANY and WASHINGTON UNIVERSITY
;  TITLE OF INVENTION: Humanized Antibodies that Sequester Amyloid Beta Peptide
;  FILE REFERENCE: 8792/293
;  CURRENT APPLICATION NUMBER: US/10/226,435A
;  CURRENT FILING DATE:  2002-11-13
;  PRIOR APPLICATION NUMBER: PCT/US01/06191
;  PRIOR FILING DATE: 2001-02-26
;  PRIOR APPLICATION NUMBER: 60/184,601
;  PRIOR FILING DATE: 2000-02-24
;  PRIOR APPLICATION NUMBER: 60/254,465
;  PRIOR FILING DATE: 2000-12-08
;  PRIOR APPLICATION NUMBER: 60/254,498
;  PRIOR FILING DATE: 2000-12-08
;  NUMBER OF SEQ ID NOS: 16
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 12
;   LENGTH: 442
;   TYPE: PRT
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Humanized antibodies
US-10-226-435A-12

  Query Match             100.0%;  Score 1263;  DB 15;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 54
US-10-487-322-12
; Sequence 12, Application US/10487322
; Publication No. US20040192898A1
; GENERAL INFORMATION:
;  APPLICANT: ELI LILLY AND COMPANY
;  TITLE OF INVENTION: ANTI-AB ANTIBODIES
```

```
;  FILE REFERENCE: X-15113
;  CURRENT APPLICATION NUMBER: US/10/487,322
;  CURRENT FILING DATE:  2004-02-17
;  PRIOR APPLICATION NUMBER: 60/313,224
;  PRIOR FILING DATE: 2001-08-17
;  NUMBER OF SEQ ID NOS: 17
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 12
;   LENGTH: 442
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Humanized antibody
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (1)..(442)
;   OTHER INFORMATION: HUMANIZED ANTIBODY HEAVY CHAIN
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (56)..(56)
;   OTHER INFORMATION: Xaa at position 56 is any amino acid, provided that if Xaa at pos
;   OTHER INFORMATION: ition 57 is neither Asp nor Pro and Xaa at position 59 is Ser or
;   OTHER INFORMATION: Thr, then Xaa at position 56 is not Asn
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (57)..(57)
;   OTHER INFORMATION: Xaa at position 57 is any amino acid, provided that if Xaa at pos
;   OTHER INFORMATION: ition 56  is Asn and Xaa at position 58 is Ser or Thr, then Xaa a
;   OTHER INFORMATION: t position 57 is Asp or Pro
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (58)..(58)
;   OTHER INFORMATION: Xaa at position 58 is any amino acid, provided that if Xaa at pos
;   OTHER INFORMATION: ition 56  is Asn and Xaa at position 57 is neither Asp nor Pro, t
;   OTHER INFORMATION: hen Axx at position 58 is neither Ser nor Thr
US-10-487-322-12

  Query Match             100.0%;  Score 1263;  DB 16;  Length 442;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        211 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 270

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        271 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 330

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        331 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 390

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 442


RESULT 55
US-10-150-475A-6
; Sequence 6, Application US/10150475A
; Publication No. US20030103985A1
; GENERAL INFORMATION:
;  APPLICANT: Adolf, G. et al.
;  TITLE OF INVENTION: Cytotoxic CD44 Antibody Immunoconjugates
;  FILE REFERENCE: 1/1211
;  CURRENT APPLICATION NUMBER: US/10/150,475A
;  CURRENT FILING DATE:  2002-05-17
;  PRIOR APPLICATION NUMBER: US 60/307,451
;  PRIOR FILING DATE: 2001-07-24
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
;   LENGTH: 444
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Humanised
;   OTHER INFORMATION: Murine Antibody BIWA 4 Heavy Chain SEQ ID NO: 6
US-10-150-475A-6

  Query Match             100.0%;  Score 1263;  DB 14;  Length 444;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        213 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 272

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        273 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 332

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 392

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        393 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 444


RESULT 56
US-10-704-522-6
; Sequence 6, Application US/10704522
; Publication No. US20040120949A1
; GENERAL INFORMATION:
;  APPLICANT: Adolf, Gunther
;  APPLICANT:  Baumann, Michael
;  APPLICANT:  Heider, Karl-Heinz
;  TITLE OF INVENTION: Compositions and methods for treating cancer using
;  TITLE OF INVENTION:  cytotoxic CD44 Antibody Immunoconjugates
;  FILE REFERENCE: 1/1414
;  CURRENT APPLICATION NUMBER: US/10/704,522
;  CURRENT FILING DATE:  2003-11-07
;  PRIOR APPLICATION NUMBER: US 60/429,516
;  PRIOR FILING DATE: 2002-11-27
;  PRIOR APPLICATION NUMBER: EP 02024881
;  PRIOR FILING DATE: 2002-11-08
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
;   LENGTH: 444
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Humanised Murine Antibody BIWA 4 Heavy Chain
US-10-704-522-6

  Query Match             100.0%;  Score 1263;  DB 16;  Length 444;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        213 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 272

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        273 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 332

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 392

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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                  ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        393 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 444


RESULT 57
US-10-645-215-6
; Sequence 6, Application US/10645215
; Publication No. US20040126379A1
; GENERAL INFORMATION:
;  APPLICANT: Adolf, Guenther
;  APPLICANT:  Baum, Anke
;  APPLICANT:  Heider, Karl-Heinz
;  TITLE OF INVENTION: Compositions and Methods for Treating Cancer using
;  TITLE OF INVENTION:  Cytotoxic CD44 Antibody Immunoconjugates and
;  TITLE OF INVENTION:  Chemotherapeutic Agents
;  FILE REFERENCE: 1/1383
;  CURRENT APPLICATION NUMBER: US/10/645,215
;  CURRENT FILING DATE:  2003-08-21
;  PRIOR APPLICATION NUMBER: EP 02 018 686.2
;  PRIOR FILING DATE: August 21, 2002
;  PRIOR APPLICATION NUMBER: US 60/405,956
;  PRIOR FILING DATE: August 26, 2002
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
;   LENGTH: 444
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Humanised Murine Antibody BIWA 4 Heavy Chain
US-10-645-215-6

  Query Match             100.0%;  Score 1263;  DB 16;  Length 444;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        213 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 272

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        273 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 332

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        333 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 392

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        393 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 444


RESULT 58
US-10-320-231A-79
; Sequence 79, Application US/10320231A
; Publication No. US20030194405A1
; GENERAL INFORMATION:
;  APPLICANT: Neben, Steven
;  APPLICANT:  Takeuchi, Toshihiko
;  APPLICANT:  Tomkinson, Adrian
;  TITLE OF INVENTION: Antibody Inhibiting Stem Cell Factor Activity And Use For
;  TITLE OF INVENTION:  Treatment Of Asthma
;  FILE REFERENCE: 7430*163
;  CURRENT APPLICATION NUMBER: US/10/320,231A
;  CURRENT FILING DATE:  2002-12-19
;  PRIOR APPLICATION NUMBER: US 60/342,174
;  PRIOR FILING DATE: 2001-12-17
;  NUMBER OF SEQ ID NOS: 85
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 79
;   LENGTH: 445
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
;   OTHER INFORMATION: synthetic sequence
US-10-320-231A-79

  Query Match             100.0%;  Score 1263;  DB 14;  Length 445;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        214 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        274 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 393

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        394 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 445


RESULT 59
US-10-408-901-34
; Sequence 34, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
;  APPLICANT: Boyle, William
;  APPLICANT:  Huang, Haichun
;  APPLICANT:  Elliot, Robin
;  APPLICANT:  Sullivan, John
;  APPLICANT:  Medlock, Eugene
;  APPLICANT:  Martin, Francis
;  TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathwa
;  TITLE OF INVENTION:  Inhibitors
;  FILE REFERENCE: MBHB 01-1145-A
;  CURRENT APPLICATION NUMBER: US/10/408,901
;  CURRENT FILING DATE:  2003-04-07
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 34
;   LENGTH: 445
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-408-901-34

  Query Match             100.0%;  Score 1263;  DB 15;  Length 445;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        214 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        274 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 393

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        394 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 445


RESULT 60
US-10-408-901-42
```

```
; Sequence 42, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
;  APPLICANT: Boyle, William
;  APPLICANT:  Huang, Haichun
;  APPLICANT:  Elliot, Robin
;  APPLICANT:  Sullivan, John
;  APPLICANT:  Medlock, Eugene
;  APPLICANT:  Martin, Francis
;  TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
;  TITLE OF INVENTION:  Inhibitors
;  FILE REFERENCE: MBHB 01-1145-A
;  CURRENT APPLICATION NUMBER: US/10/408,901
;  CURRENT FILING DATE:  2003-04-07
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 42
;   LENGTH: 445
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-408-901-42

  Query Match             100.0%;  Score 1263;  DB 15;  Length 445;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        214 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 273

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        274 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 333

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        334 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 393

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        394 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 445


RESULT 61
US-10-408-901-30
; Sequence 30, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
;  APPLICANT: Boyle, William
;  APPLICANT:  Huang, Haichun
;  APPLICANT:  Elliot, Robin
;  APPLICANT:  Sullivan, John
;  APPLICANT:  Medlock, Eugene
;  APPLICANT:  Martin, Francis
;  TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
;  TITLE OF INVENTION:  Inhibitors
;  FILE REFERENCE: MBHB 01-1145-A
;  CURRENT APPLICATION NUMBER: US/10/408,901
;  CURRENT FILING DATE:  2003-04-07
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 30
;   LENGTH: 446
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-408-901-30

  Query Match             100.0%;  Score 1263;  DB 15;  Length 446;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 62
US-10-408-901-38
; Sequence 38, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
;  APPLICANT: Boyle, William
;  APPLICANT:  Huang, Haichun
;  APPLICANT:  Elliot, Robin
;  APPLICANT:  Sullivan, John
;  APPLICANT:  Medlock, Eugene
;  APPLICANT:  Martin, Francis
;  TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
;  TITLE OF INVENTION:  Inhibitors
;  FILE REFERENCE: MBHB 01-1145-A
;  CURRENT APPLICATION NUMBER: US/10/408,901
;  CURRENT FILING DATE:  2003-04-07
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 38
;   LENGTH: 446
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-408-901-38

  Query Match             100.0%;  Score 1263;  DB 15;  Length 446;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 63
US-10-408-901-46
; Sequence 46, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
;  APPLICANT: Boyle, William
;  APPLICANT:  Huang, Haichun
;  APPLICANT:  Elliot, Robin
;  APPLICANT:  Sullivan, John
;  APPLICANT:  Medlock, Eugene
;  APPLICANT:  Martin, Francis
;  TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathwa
;  TITLE OF INVENTION:  Inhibitors
```

```
;  FILE REFERENCE: MBHB 01-1145-A
;  CURRENT APPLICATION NUMBER: US/10/408,901
;  CURRENT FILING DATE:  2003-04-07
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 46
;   LENGTH: 446
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-408-901-46

  Query Match           100.0%;  Score 1263;  DB 15;  Length 446;
  Best Local Similarity  100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 64
US-10-408-901-50
; Sequence 50, Application US/10408901
; Publication No. US20040023313A1
; GENERAL INFORMATION:
;  APPLICANT: Boyle, William
;  APPLICANT:  Huang, Haichun
;  APPLICANT:  Elliot, Robin
;  APPLICANT:  Sullivan, John
;  APPLICANT:  Medlock, Eugene
;  APPLICANT:  Martin, Francis
;  TITLE OF INVENTION: Human Anti-OPGL Neutralizing Antibodies As Selective OPGL Pathway
;  TITLE OF INVENTION:  Inhibitors
;  FILE REFERENCE: MBHB 01-1145-A
;  CURRENT APPLICATION NUMBER: US/10/408,901
;  CURRENT FILING DATE:  2003-04-07
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 50
;   LENGTH: 446
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-408-901-50

  Query Match           100.0%;  Score 1263;  DB 15;  Length 446;
  Best Local Similarity  100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 65
US-10-435-299-7
; Sequence 7, Application US/10435299
; Publication No. US20040052783A1
; GENERAL INFORMATION:
;  APPLICANT: Weiner, George
;  APPLICANT:  Gingrich, Roger
;  APPLICANT:  Link, Brian
;  APPLICANT:  Tso, J. Yun
;  TITLE OF INVENTION: HUMANIZED ANTIBODIES AGAINST CD3
;  FILE REFERENCE: 05882-0176-CNUS04
;  CURRENT APPLICATION NUMBER: US/10/435,299
;  CURRENT FILING DATE:  2003-05-09
;  PRIOR APPLICATION NUMBER: US 09/618,380
;  PRIOR FILING DATE: 2000-07-18
;  PRIOR APPLICATION NUMBER: US 08/397,411
;  PRIOR FILING DATE: 1995-03-01
;  PRIOR APPLICATION NUMBER: US 07/859,583
;  PRIOR FILING DATE: 1992-03-27
;  NUMBER OF SEQ ID NOS: 14
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
;   LENGTH: 446
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Complete heavy chain of Humanized 1D10 Ab
US-10-435-299-7

  Query Match           100.0%;  Score 1263;  DB 15;  Length 446;
  Best Local Similarity  100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        215 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 274

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        275 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 334

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        335 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 394

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        395 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 446


RESULT 66
US-09-256-156-1
; Sequence 1, Application US/09256156A
; Publication No. US20030105294A1
; GENERAL INFORMATION:
;  APPLICANT: GILLIES, Stephen D
;  APPLICANT: LO, Kin-Ming
;  APPLICANT: LAN, Yan
;  APPLICANT: WESOLOWSKI, John
;  TITLE OF INVENTION: Enhancing the Circulating Half-life of Antibody-based
;  TITLE OF INVENTION: Fusion Proteins
;  FILE REFERENCE: LEX-003
;  CURRENT APPLICATION NUMBER: US/09/256,156A
;  CURRENT FILING DATE: 1999-02-24
;  EARLIER APPLICATION NUMBER: US 60/075,887
;  EARLIER FILING DATE: 1998-02-25
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
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;   LENGTH: 447
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: IGG-1 CHAIN C REGION
;   FEATURE:
;   NAME/KEY: VARIANT
;   LOCATION: (1)..(117)
;   OTHER INFORMATION: The Xaa at positions 1 to 117 are non-conserved
;   OTHER INFORMATION: amino acids
US-09-256-156-1

  Query Match             100.0%;  Score 1263;  DB 10;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 67
US-10-684-957-17
; Sequence 17, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
;  APPLICANT: Amgen, Inc.
;  APPLICANT:  Welcher, Andrew
;  APPLICANT:  Chute, Hilary
;  APPLICANT:  Li, Luke
;  APPLICANT:  Huang, Haichun
;  TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gam
;  TITLE OF INVENTION:  Pathway Inhibitors
;  FILE REFERENCE: 01-1635-B
;  CURRENT APPLICATION NUMBER: US/10/684,957
;  CURRENT FILING DATE:  2003-10-14
;  PRIOR APPLICATION NUMBER: US 60/419,057
;  PRIOR FILING DATE: 2002-10-16
;  PRIOR APPLICATION NUMBER: US 60/479,241
;  PRIOR FILING DATE: 2003-06-17
;  NUMBER OF SEQ ID NOS: 57
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 17
;   LENGTH: 447
;   TYPE: PRT
;   ORGANISM: homo sapiens
US-10-684-957-17

  Query Match             100.0%;  Score 1263;  DB 16;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 68
US-10-684-957-19
; Sequence 19, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
;  APPLICANT: Amgen, Inc.
;  APPLICANT:  Welcher, Andrew
;  APPLICANT:  Chute, Hilary
;  APPLICANT:  Li, Luke
;  APPLICANT:  Huang, Haichun
;  TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-ga
;  TITLE OF INVENTION:  Pathway Inhibitors
;  FILE REFERENCE: 01-1635-B
;  CURRENT APPLICATION NUMBER: US/10/684,957
;  CURRENT FILING DATE:  2003-10-14
;  PRIOR APPLICATION NUMBER: US 60/419,057
;  PRIOR FILING DATE: 2002-10-16
;  PRIOR APPLICATION NUMBER: US 60/479,241
;  PRIOR FILING DATE: 2003-06-17
;  NUMBER OF SEQ ID NOS: 57
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 19
;   LENGTH: 447
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-684-957-19

  Query Match             100.0%;  Score 1263;  DB 16;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 69
US-10-684-957-21
; Sequence 21, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
;  APPLICANT: Amgen, Inc.
;  APPLICANT:  Welcher, Andrew
;  APPLICANT:  Chute, Hilary
;  APPLICANT:  Li, Luke
;  APPLICANT:  Huang, Haichun
;  TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-ga
;  TITLE OF INVENTION:  Pathway Inhibitors
;  FILE REFERENCE: 01-1635-B
;  CURRENT APPLICATION NUMBER: US/10/684,957
;  CURRENT FILING DATE:  2003-10-14
;  PRIOR APPLICATION NUMBER: US 60/419,057
;  PRIOR FILING DATE: 2002-10-16
```

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;  PRIOR APPLICATION NUMBER: US 60/479,241
;  PRIOR FILING DATE: 2003-06-17
;  NUMBER OF SEQ ID NOS: 57
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 21
;   LENGTH: 447
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-684-957-21

  Query Match             100.0%;  Score 1263;  DB 16;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 70
US-10-684-957-32
; Sequence 32, Application US/10684957
; Publication No. US20050004353A1
; GENERAL INFORMATION:
;  APPLICANT: Amgen, Inc.
;  APPLICANT:  Welcher, Andrew
;  APPLICANT:  Chute, Hilary
;  APPLICANT:  Li, Luke
;  APPLICANT:  Huang, Haichun
;  TITLE OF INVENTION: Human anti-IFN-gamma Neutralizing Antibodies as Selective IFN-gam
;  TITLE OF INVENTION:  Pathway Inhibitors
;  FILE REFERENCE: 01-1635-B
;  CURRENT APPLICATION NUMBER: US/10/684,957
;  CURRENT FILING DATE:  2003-10-14
;  PRIOR APPLICATION NUMBER: US 60/419,057
;  PRIOR FILING DATE: 2002-10-16
;  PRIOR APPLICATION NUMBER: US 60/479,241
;  PRIOR FILING DATE: 2003-06-17
;  NUMBER OF SEQ ID NOS: 57
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 32
;   LENGTH: 447
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-684-957-32

  Query Match             100.0%;  Score 1263;  DB 16;  Length 447;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 275

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 335

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 395

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 447


RESULT 71
US-10-378-567-2
; Sequence 2, Application US/10378567
; Publication No. US20040006208A1
; GENERAL INFORMATION:
;  APPLICANT: KARPUSAS, MICHAEL
;  APPLICANT:  HSU, YEN-MING
;  APPLICANT:  TAYLOR, FREDERICK R.
;  APPLICANT:  ZHENG, ZHONGLI
;  TITLE OF INVENTION: CO-CRYSTAL STRUCTURE OF MONOCLONAL ANTIBODY 5C8 AND
;  TITLE OF INVENTION:  CD154, AND USE THEREOF IN DRUG DESIGN
;  FILE REFERENCE: A096CON1
;  CURRENT APPLICATION NUMBER: US/10/378,567
;  CURRENT FILING DATE:  2003-02-28
;  PRIOR APPLICATION NUMBER: PCT/US01/27352
;  PRIOR FILING DATE: 2001-08-31
;  PRIOR APPLICATION NUMBER: 60/276,452
;  PRIOR FILING DATE: 2001-03-16
;  PRIOR APPLICATION NUMBER: 60/229,933
;  PRIOR FILING DATE: 2000-09-01
;  NUMBER OF SEQ ID NOS: 3
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
;   LENGTH: 448
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: humanized 5c8 heavy chain amino acid
US-10-378-567-2

  Query Match             100.0%;  Score 1263;  DB 15;  Length 448;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        217 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 276

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        277 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 336

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 396

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        397 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 448


RESULT 72
US-10-449-566-107
; Sequence 107, Application US/10449566
; Publication No. US20040010124A1
; GENERAL INFORMATION:
;  APPLICANT: JOHNSON, Leslie S.
;  APPLICANT:  HUANG, Ling
;  APPLICANT:  LI, Hua
;  APPLICANT:  TUAILLON, Nadine
;  TITLE OF INVENTION: CD16A BINDING PROTEINS AND USE FOR THE
;  TITLE OF INVENTION:  TREATMENT OF IMMUNE DISORDERS
;  FILE REFERENCE: 529392000100
;  CURRENT APPLICATION NUMBER: US/10/449,566
;  CURRENT FILING DATE:  2003-05-29
;  PRIOR APPLICATION NUMBER: 60/384,689
```

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;  PRIOR FILING DATE: 2002-05-30
;  PRIOR APPLICATION NUMBER: 60/439,320
;  PRIOR FILING DATE: 2003-01-10
;  NUMBER OF SEQ ID NOS: 119
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 107
;   LENGTH: 448
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Construct
US-10-449-566-107

  Query Match             100.0%;  Score 1263;  DB 15;  Length 448;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        217 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 276

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        277 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 336

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 396

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        397 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 448


RESULT 73
US-09-875-338-17
; Sequence 17, Application US/09875338
; Patent No. US20020095024A1
; GENERAL INFORMATION:
;  APPLICANT: MIKESELL, GLEN E.
;  APPLICANT:  CHANG, HAN
;  APPLICANT:  FINGER, JOSHUA N.
;  APPLICANT:  YANG, GUCHEN
;  APPLICANT:  LU, PIN
;  APPLICANT:  ZHOU, XIA-DI
;  APPLICANT:  PEACH, ROBERT
;  TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
;  TITLE OF INVENTION:  IMMUNOMODULATION
;  FILE REFERENCE: 3053-4071US2
;  CURRENT APPLICATION NUMBER: US/09/875,338
;  CURRENT FILING DATE:  2001-06-06
;  PRIOR APPLICATION NUMBER: 60/272,107
;  PRIOR FILING DATE: 2001-02-28
;  PRIOR APPLICATION NUMBER: 60/209,811
;  PRIOR FILING DATE: 2000-06-06
;  NUMBER OF SEQ ID NOS: 94
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 17
;   LENGTH: 451
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: fusion construct
US-09-875-338-17

  Query Match             100.0%;  Score 1263;  DB 9;  Length 451;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451


RESULT 74
US-09-822-698A-26
; Sequence 26, Application US/09822698A
; Patent No. US20020146750A1
; GENERAL INFORMATION:
;  APPLICANT: Hoogenboom, Hendricus R.J.M.
;  APPLICANT:  Henderikx, Maria P.G.
;  TITLE OF INVENTION: MUCIN-1 Specific Binding Members and Methods of Use Thereof
;  FILE REFERENCE: DYX-015.1 US
;  CURRENT APPLICATION NUMBER: US/09/822,698A
;  CURRENT FILING DATE:  2001-03-30
;  PRIOR APPLICATION NUMBER: US 09/538,913
;  PRIOR FILING DATE: 2000-03-30
;  NUMBER OF SEQ ID NOS: 112
;  SOFTWARE: Microsoft Word
; SEQ ID NO 26
;   LENGTH: 451
;   TYPE: PRT
;   ORGANISM: artificial sequence
;   FEATURE:
;   OTHER INFORMATION: immunoglobulin heavy chain of MUC1-specific PH1-IgG1
US-09-822-698A-26

  Query Match             100.0%;  Score 1263;  DB 9;  Length 451;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451


RESULT 75
US-10-077-023-17
; Sequence 17, Application US/10077023
; Publication No. US20030031675A1
; GENERAL INFORMATION:
;  APPLICANT: MIKESELL, GLEN E.
;  APPLICANT:  CHANG, HAN
;  APPLICANT:  FINGER, JOSHUA N.
;  APPLICANT:  YANG, GUCHEN
;  APPLICANT:  LU, PIN
;  APPLICANT:  ZHOU, XIA-DI
;  APPLICANT:  PEACH, ROBERT
;  TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
;  TITLE OF INVENTION:  IMMUNOMODULATION
;  FILE REFERENCE: 3053-4071US3
```

```
;  CURRENT APPLICATION NUMBER: US/10/077,023
;  CURRENT FILING DATE:  2002-02-15
;  PRIOR APPLICATION NUMBER: 60/272,107
;  PRIOR FILING DATE: 2001-02-28
;  PRIOR APPLICATION NUMBER: 60/209,811
;  PRIOR FILING DATE: 2000-06-06
;  NUMBER OF SEQ ID NOS: 138
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 17
;   LENGTH: 451
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: fusion construct
US-10-077-023-17

  Query Match           100.0%;  Score 1263;  DB 14;  Length 451;
  Best Local Similarity  100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451


RESULT 76
US-10-849-615-69
; Sequence 69, Application US/10849615
; Publication No. US20050025764A1
; GENERAL INFORMATION:
;  APPLICANT: Allan, Barrett W.
;  APPLICANT:  Davies, Julian
;  APPLICANT:  Marquis, David M.
;  APPLICANT:  Ondek, Brian
;  APPLICANT:  Watkins, Jeffry D.
;  TITLE OF INVENTION: CD20 BINDING MOLECULES
;  FILE REFERENCE: AME-09016
;  CURRENT APPLICATION NUMBER: US/10/849,615
;  CURRENT FILING DATE:  2004-05-20
;  NUMBER OF SEQ ID NOS: 102
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 69
;   LENGTH: 451
;   TYPE: PRT
;   ORGANISM: artificial
;   FEATURE:
;   OTHER INFORMATION: Synthetic construct
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (1)..(451)
;   OTHER INFORMATION: AME 33 complete heavy chain
US-10-849-615-69

  Query Match           100.0%;  Score 1263;  DB 17;  Length 451;
  Best Local Similarity  100.0%;  Pred. No. 2.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        220 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 279

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 339

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 399

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 451


RESULT 77
US-09-773-877A-16
; Sequence 16, Application US/09773877A
; Publication No. US20030017977A1
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877A
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 16
;   LENGTH: 452
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Flt1(2-3 deltaB)-Fc
US-09-773-877A-16

  Query Match           100.0%;  Score 1263;  DB 10;  Length 452;
  Best Local Similarity  100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 280

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 340

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 400

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 452


RESULT 78
US-10-813-483-6
; Sequence 6, Application US/10813483
; Publication No. US20040197324A1
; GENERAL INFORMATION:
;  APPLICANT: LIU, JUN
;  APPLICANT:  SHIRE, STEVEN J.
;  TITLE OF INVENTION: High Concentration Antibody and Protein Formulations
;  FILE REFERENCE: P2026R1-US
;  CURRENT APPLICATION NUMBER: US/10/813,483
;  CURRENT FILING DATE:  2004-03-29
;  PRIOR APPLICATION NUMBER: US 60/460,659
;  PRIOR FILING DATE: 2003-04-04
;  NUMBER OF SEQ ID NOS: 6
; SEQ ID NO 6
;   LENGTH: 453
;   TYPE: PRT
;   ORGANISM: Artificial sequence
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;   FEATURE:
;   OTHER INFORMATION: Hu-901, heavy chain
US-10-813-483-6

  Query Match            100.0%;  Score 1263;  DB 16;  Length 453;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 281

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        282 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 341

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        342 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 401

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        402 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 453


RESULT 79
US-09-773-877A-18
; Sequence 18, Application US/09773877A
; Publication No. US20030017977A1
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877A
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 18
;   LENGTH: 462
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Flt1(2-3)-Fc (Mut3)
US-09-773-877A-18

  Query Match            100.0%;  Score 1263;  DB 10;  Length 462;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 290

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 350

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 410

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 462


RESULT 80
US-10-404-724-8
; Sequence 8, Application US/10404724
; Publication No. US20030203447A1
; GENERAL INFORMATION:
;  APPLICANT: Horwitz, Arnold H.
;  TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant
;  TITLE OF INVENTION:  Polypeptides
;  FILE REFERENCE: 13698US01
;  CURRENT APPLICATION NUMBER: US/10/404,724
;  CURRENT FILING DATE:  2003-03-31
;  PRIOR APPLICATION NUMBER: US 60/368,530
;  PRIOR FILING DATE: 2002-03-29
;  NUMBER OF SEQ ID NOS: 79
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
;   LENGTH: 465
;   TYPE: PRT
;   ORGANISM: Homo Sapiens
US-10-404-724-8

  Query Match            100.0%;  Score 1263;  DB 15;  Length 465;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 81
US-10-404-724-23
; Sequence 23, Application US/10404724
; Publication No. US20030203447A1
; GENERAL INFORMATION:
;  APPLICANT: Horwitz, Arnold H.
;  TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant
;  TITLE OF INVENTION:  Polypeptides
;  FILE REFERENCE: 13698US01
;  CURRENT APPLICATION NUMBER: US/10/404,724
;  CURRENT FILING DATE:  2003-03-31
;  PRIOR APPLICATION NUMBER: US 60/368,530
;  PRIOR FILING DATE: 2002-03-29
;  NUMBER OF SEQ ID NOS: 79
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 23
;   LENGTH: 465
;   TYPE: PRT
;   ORGANISM: Homo Sapiens
US-10-404-724-23

  Query Match            100.0%;  Score 1263;  DB 15;  Length 465;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 82
US-10-404-724-25
; Sequence 25, Application US/10404724
; Publication No. US20030203447A1
; GENERAL INFORMATION:
;  APPLICANT: Horwitz, Arnold H.
;  TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant
;  TITLE OF INVENTION:  Polypeptides
;  FILE REFERENCE: 13698US01
;  CURRENT APPLICATION NUMBER: US/10/404,724
;  CURRENT FILING DATE:  2003-03-31
;  PRIOR APPLICATION NUMBER: US 60/368,530
;  PRIOR FILING DATE: 2002-03-29
;  NUMBER OF SEQ ID NOS: 79
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 25
;   LENGTH: 465
;   TYPE: PRT
;   ORGANISM: Homo Sapiens
US-10-404-724-25

  Query Match             100.0%;  Score 1263;  DB 15;  Length 465;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 83
US-10-816-276-4
; Sequence 4, Application US/10816276
; Publication No. US20050009097A1
; GENERAL INFORMATION:
;  APPLICANT: Better, Marc D.
;  APPLICANT:  Horwitz, Arnold H.
;  TITLE OF INVENTION: Human Engineered to Antibodies to Ep-CAM
;  FILE REFERENCE: 14923US02
;  CURRENT APPLICATION NUMBER: US/10/816,276
;  CURRENT FILING DATE:  2004-03-31
;  PRIOR APPLICATION NUMBER: 60/459,334
;  PRIOR FILING DATE: 2003-03-31
;  NUMBER OF SEQ ID NOS: 59
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 4
;   LENGTH: 465
;   TYPE: PRT
;   ORGANISM: Homo Sapiens
US-10-816-276-4

  Query Match             100.0%;  Score 1263;  DB 17;  Length 465;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 84
US-10-816-276-19
; Sequence 19, Application US/10816276
; Publication No. US20050009097A1
; GENERAL INFORMATION:
;  APPLICANT: Better, Marc D.
;  APPLICANT:  Horwitz, Arnold H.
;  TITLE OF INVENTION: Human Engineered to Antibodies to Ep-CAM
;  FILE REFERENCE: 14923US02
;  CURRENT APPLICATION NUMBER: US/10/816,276
;  CURRENT FILING DATE:  2004-03-31
;  PRIOR APPLICATION NUMBER: 60/459,334
;  PRIOR FILING DATE: 2003-03-31
;  NUMBER OF SEQ ID NOS: 59
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 19
;   LENGTH: 465
;   TYPE: PRT
;   ORGANISM: Homo Sapiens
US-10-816-276-19

  Query Match             100.0%;  Score 1263;  DB 17;  Length 465;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 85
US-10-816-276-21
; Sequence 21, Application US/10816276
; Publication No. US20050009097A1
; GENERAL INFORMATION:
;  APPLICANT: Better, Marc D.
;  APPLICANT:  Horwitz, Arnold H.
;  TITLE OF INVENTION: Human Engineered to Antibodies to Ep-CAM
;  FILE REFERENCE: 14923US02
;  CURRENT APPLICATION NUMBER: US/10/816,276
;  CURRENT FILING DATE:  2004-03-31
;  PRIOR APPLICATION NUMBER: 60/459,334
;  PRIOR FILING DATE: 2003-03-31
;  NUMBER OF SEQ ID NOS: 59
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 21
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;   LENGTH: 465
;   TYPE: PRT
;   ORGANISM: Homo Sapiens
US-10-816-276-21

  Query Match             100.0%;  Score 1263;  DB 17;  Length 465;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        234 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 293

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 353

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 413

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 465


RESULT 86
US-10-108-260A-4293
; Sequence 4293, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20040005560A1el full length cDNA
;  FILE REFERENCE: H1-A0106
;  CURRENT APPLICATION NUMBER: US/10/108,260A
;  CURRENT FILING DATE:  2002-03-27
;  NUMBER OF SEQ ID NOS: 5458
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4293
;   LENGTH: 467
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-108-260A-4293

  Query Match             100.0%;  Score 1263;  DB 15;  Length 467;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 87
US-10-656-769-32
; Sequence 32, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:
;  APPLICANT: Varnum, Brian
;  APPLICANT:  Witte, Alison
;  APPLICANT:  Vezina, Chris
;  APPLICANT:  Wong, Lu Min
;  APPLICANT:  Qian, Xueming
;  TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
;  FILE REFERENCE: 01,1554
;  CURRENT APPLICATION NUMBER: US/10/656,769
;  CURRENT FILING DATE:  2003-09-05
;  NUMBER OF SEQ ID NOS: 79
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 32
;   LENGTH: 467
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-656-769-32

  Query Match             100.0%;  Score 1263;  DB 15;  Length 467;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 88
US-10-656-769-20
; Sequence 20, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:
;  APPLICANT: Varnum, Brian
;  APPLICANT:  Witte, Alison
;  APPLICANT:  Vezina, Chris
;  APPLICANT:  Wong, Lu Min
;  APPLICANT:  Qian, Xueming
;  TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
;  FILE REFERENCE: 01,1554
;  CURRENT APPLICATION NUMBER: US/10/656,769
;  CURRENT FILING DATE:  2003-09-05
;  NUMBER OF SEQ ID NOS: 79
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
;   LENGTH: 469
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-656-769-20

  Query Match             100.0%;  Score 1263;  DB 15;  Length 469;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        238 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 297

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        298 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 357

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        358 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 417
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        418 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 469


RESULT 89
US-10-656-769-26
; Sequence 26, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:
;  APPLICANT: Varnum, Brian
;  APPLICANT:  Witte, Alison
;  APPLICANT:  Vezina, Chris
;  APPLICANT:  Wong, Lu Min
;  APPLICANT:  Qian, Xueming
;  TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
;  FILE REFERENCE: 01,1554
;  CURRENT APPLICATION NUMBER: US/10/656,769
;  CURRENT FILING DATE:  2003-09-05
;  NUMBER OF SEQ ID NOS: 79
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 26
;   LENGTH: 469
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-656-769-26

  Query Match           100.0%;  Score 1263;  DB 15;  Length 469;
  Best Local Similarity  100.0%;  Pred. No. 2.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        238 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 297

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        298 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 357

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        358 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 417

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        418 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 469


RESULT 90
US-10-104-047-3730
; Sequence 3730, Application US/10104047
; Publication No. US20030236392A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20030236392A1el full length cDNA
;  FILE REFERENCE: H1-A0105
;  CURRENT APPLICATION NUMBER: US/10/104,047
;  CURRENT FILING DATE:  2002-03-25
;  PRIOR APPLICATION NUMBER:
;  PRIOR FILING DATE:
;  NUMBER OF SEQ ID NOS: 4096
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3730
;   LENGTH: 470
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-104-047-3730

  Query Match           100.0%;  Score 1263;  DB 15;  Length 470;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 470


RESULT 91
US-10-108-260A-4285
; Sequence 4285, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20040005560A1el full length cDNA
;  FILE REFERENCE: H1-A0106
;  CURRENT APPLICATION NUMBER: US/10/108,260A
;  CURRENT FILING DATE:  2002-03-27
;  NUMBER OF SEQ ID NOS: 5458
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4285
;   LENGTH: 471
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-108-260A-4285

  Query Match           100.0%;  Score 1263;  DB 15;  Length 471;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 419

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        420 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 471


RESULT 92
US-10-108-260A-4294
; Sequence 4294, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20040005560A1el full length cDNA
;  FILE REFERENCE: H1-A0106
;  CURRENT APPLICATION NUMBER: US/10/108,260A
;  CURRENT FILING DATE:  2002-03-27
;  NUMBER OF SEQ ID NOS: 5458
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4294
;   LENGTH: 471
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-108-260A-4294
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  Query Match             100.0%;  Score 1263;  DB 15;  Length 471;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 299

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 359

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        360 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 419

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        420 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 471


RESULT 93
US-10-108-260A-4073
; Sequence 4073, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20040005560A1el full length cDNA
;  FILE REFERENCE: H1-A0106
;  CURRENT APPLICATION NUMBER: US/10/108,260A
;  CURRENT FILING DATE:  2002-03-27
;  NUMBER OF SEQ ID NOS: 5458
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4073
;   LENGTH: 472
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-108-260A-4073

  Query Match             100.0%;  Score 1263;  DB 15;  Length 472;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 300

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 360

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 420

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 472


RESULT 94
US-10-108-260A-4284
; Sequence 4284, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20040005560A1el full length cDNA
;  FILE REFERENCE: H1-A0106
;  CURRENT APPLICATION NUMBER: US/10/108,260A
;  CURRENT FILING DATE:  2002-03-27
;  NUMBER OF SEQ ID NOS: 5458
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4284
;   LENGTH: 473
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-108-260A-4284

  Query Match             100.0%;  Score 1263;  DB 15;  Length 473;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 301

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 361

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 421

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 473


RESULT 95
US-10-108-260A-4282
; Sequence 4282, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20040005560A1el full length cDNA
;  FILE REFERENCE: H1-A0106
;  CURRENT APPLICATION NUMBER: US/10/108,260A
;  CURRENT FILING DATE:  2002-03-27
;  NUMBER OF SEQ ID NOS: 5458
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4282
;   LENGTH: 474
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-108-260A-4282

  Query Match             100.0%;  Score 1263;  DB 15;  Length 474;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 302

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 362

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        363 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 422

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        423 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 474


RESULT 96
US-09-740-002-27
; Sequence 27, Application US/09740002
; Patent No. US20020001798A1
; GENERAL INFORMATION:
;  APPLICANT: BRAMS, PETER
;  APPLICANT:  MORROW, PHILLIP
;  TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
```

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;  TITLE OF INVENTION:  SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
;  TITLE OF INVENTION:  MANUFACTURE AND THERAPEUTIC USE THEREOF
;  FILE REFERENCE: 037003-0275759
;  CURRENT APPLICATION NUMBER: US/09/740,002
;  CURRENT FILING DATE:  2000-12-20
;  PRIOR APPLICATION NUMBER: 09/335,697
;  PRIOR FILING DATE: 1999-06-18
;  PRIOR APPLICATION NUMBER: 08/488,376
;  PRIOR FILING DATE: 1995-06-07
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
;   LENGTH: 475
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-740-002-27

  Query Match           100.0%;  Score 1263;  DB 9;  Length 475;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 97
US-10-325-698-27
; Sequence 27, Application US/10325698
; Publication No. US20040076631A1
; GENERAL INFORMATION:
;  APPLICANT: BRAMS, PETER
;  APPLICANT:  MORROW, PHILLIP
;  TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
;  TITLE OF INVENTION:  SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
;  TITLE OF INVENTION:  MANUFACTURE AND THERAPEUTIC USE THEREOF
;  FILE REFERENCE: 037003-0275759
;  CURRENT APPLICATION NUMBER: US/10/325,698
;  CURRENT FILING DATE:  2002-12-19
;  PRIOR APPLICATION NUMBER: US/09/740,002
;  PRIOR FILING DATE: 2000-12-20
;  PRIOR APPLICATION NUMBER: 09/335,697
;  PRIOR FILING DATE: 1999-06-18
;  PRIOR APPLICATION NUMBER: 08/488,376
;  PRIOR FILING DATE: 1995-06-07
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
;   LENGTH: 475
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-325-698-27

  Query Match           100.0%;  Score 1263;  DB 15;  Length 475;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 475


RESULT 98
US-09-758-173-4
; Sequence 4, Application US/09758173
; Publication No. US20010024648A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/758,173
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-758-173-4

  Query Match           100.0%;  Score 1263;  DB 9;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 99
US-09-758-173-12
; Sequence 12, Application US/09758173
; Publication No. US20010024648A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/758,173
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-758-173-12

  Query Match             100.0%;  Score 1263;  DB 9;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 100
US-09-747-669-3
; Sequence 3, Application US/09747669
; Patent No. US20020122807A1
; GENERAL INFORMATION:
;  APPLICANT: Dan, Michael D.
;  APPLICANT:  Saleh, Mansoor
;  TITLE OF INVENTION: ANTIGEN BINDING FRAGMENTS, DESIGNATED
;  TITLE OF INVENTION:  4B5 THAT SPECIFICALLY DETECT CANCER CELLS, NUCLEOTIDES
;  TITLE OF INVENTION:  ENCODING THE FRAGMENTS, AND USE THEREOF FOR THE PROPHYLAXIS
;  TITLE OF INVENTION:  AND DETECTION OF CANCERS
;  FILE REFERENCE: 316082001001
;  CURRENT APPLICATION NUMBER: US/09/747,669
;  CURRENT FILING DATE:  2002-04-08
;  PRIOR APPLICATION NUMBER: US 09/111,286
;  PRIOR FILING DATE: 1998-07-07
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
;   LENGTH: 476
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic construct
US-09-747-669-3

  Query Match             100.0%;  Score 1263;  DB 9;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 101
US-09-948-429B-4
; Sequence 4, Application US/09948429B
; Patent No. US20020177689A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
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;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/948,429B
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-948-429B-4

  Query Match             100.0%;  Score 1263;  DB 9;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 102
US-09-948-429B-12
; Sequence 12, Application US/09948429B
; Patent No. US20020177689A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/948,429B
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-948-429B-12

  Query Match             100.0%;  Score 1263;  DB 9;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 103
US-10-124-905-4
; Sequence 4, Application US/10124905
; Publication No. US20020166136A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/124,905
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
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;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-10-124-905-4

  Query Match            100.0%;  Score 1263;  DB 13;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 104
US-10-124-905-12
; Sequence 12, Application US/10124905
; Publication No. US20020166136A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/124,905
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-10-124-905-12

  Query Match            100.0%;  Score 1263;  DB 13;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 105
US-10-290-703-3
; Sequence 3, Application US/10290703
; Publication No. US20030118593A1
; GENERAL INFORMATION:
;  APPLICANT: Dan, Michael D.
;  APPLICANT:  Saleh, Mansoor
;  TITLE OF INVENTION: ANTIGEN BINDING FRAGMENTS, DESIGNATED
;  TITLE OF INVENTION:  4B5, THAT SPECIFICALLY DETECT CANCER CELLS, NUCLEOTIDES
;  TITLE OF INVENTION:  ENCODING THE FRAGMENTS, AND USE THEREOF FOR THE PROPHYLAXIS
;  TITLE OF INVENTION:  AND DETECTION OF CANCERS
;  FILE REFERENCE: 316082001002
;  CURRENT APPLICATION NUMBER: US/10/290,703
;  CURRENT FILING DATE:  2002-11-08
;  PRIOR APPLICATION NUMBER: US 09/747,669
;  PRIOR FILING DATE: 2000-12-21
;  PRIOR APPLICATION NUMBER: US 09/111,286
;  PRIOR FILING DATE: 1998-07-07
;  PRIOR APPLICATION NUMBER: US 60/051,945
;  PRIOR FILING DATE: 1997-07-08
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
;   LENGTH: 476
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic construct
US-10-290-703-3

  Query Match            100.0%;  Score 1263;  DB 14;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
```

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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 106
US-10-124-807-4
; Sequence 4, Application US/10124807
; Publication No. US20030166207A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/124,807
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-10-124-807-4

  Query Match             100.0%;  Score 1263;  DB 14;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 107
US-10-124-807-12
; Sequence 12, Application US/10124807
; Publication No. US20030166207A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/124,807
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  12:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 476 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-10-124-807-12

  Query Match             100.0%;  Score 1263;  DB 14;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 108
US-10-291-532-4
```

```
; Sequence 4, Application US/10291532
; Publication No. US20030180290A1
; GENERAL INFORMATION:
;  APPLICANT: HARIHARAN, KANDASAMY
;  APPLICANT:  HANNA, NABIL
;  TITLE OF INVENTION: ANTI-CD80 ANTIBODY HAVING ADCC ACTIVITY FOR ADCC
;  TITLE OF INVENTION:  MEDIATED KILLING OF B CELL LYMPHOMA CELLS ALONE OR IN
;  TITLE OF INVENTION:  COMBINATION WITH OTHER THERAPIES
;  FILE REFERENCE: 037003/291872
;  CURRENT APPLICATION NUMBER: US/10/291,532
;  CURRENT FILING DATE:  2002-11-12
;  PRIOR APPLICATION NUMBER: 60/331,187
;  PRIOR FILING DATE: 2001-11-09
;  PRIOR APPLICATION NUMBER: 09/758,173
;  PRIOR FILING DATE: 2001-01-12
;  PRIOR APPLICATION NUMBER: 09/383,916
;  PRIOR FILING DATE: 1999-08-26
;  PRIOR APPLICATION NUMBER: 08/487,950
;  PRIOR FILING DATE: 1995-06-07
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 476
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: primatized peptide sequence
US-10-291-532-4

  Query Match           100.0%;  Score 1263;  DB 14;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 109
US-10-291-532-12
; Sequence 12, Application US/10291532
; Publication No. US20030180290A1
; GENERAL INFORMATION:
;  APPLICANT: HARIHARAN, KANDASAMY
;  APPLICANT:  HANNA, NABIL
;  TITLE OF INVENTION: ANTI-CD80 ANTIBODY HAVING ADCC ACTIVITY FOR ADCC
;  TITLE OF INVENTION:  MEDIATED KILLING OF B CELL LYMPHOMA CELLS ALONE OR IN
;  TITLE OF INVENTION:  COMBINATION WITH OTHER THERAPIES
;  FILE REFERENCE: 037003/291872
;  CURRENT APPLICATION NUMBER: US/10/291,532
;  CURRENT FILING DATE:  2002-11-12
;  PRIOR APPLICATION NUMBER: 60/331,187
;  PRIOR FILING DATE: 2001-11-09
;  PRIOR APPLICATION NUMBER: 09/758,173
;  PRIOR FILING DATE: 2001-01-12
;  PRIOR APPLICATION NUMBER: 09/383,916
;  PRIOR FILING DATE: 1999-08-26
;  PRIOR APPLICATION NUMBER: 08/487,950
;  PRIOR FILING DATE: 1995-06-07
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
;   LENGTH: 476
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: primatized peptide sequence
US-10-291-532-12

  Query Match           100.0%;  Score 1263;  DB 14;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 110
US-10-409-938-15
; Sequence 15, Application US/10409938
; Publication No. US20030219733A1
; GENERAL INFORMATION:
;  APPLICANT: Clark et al.
;  TITLE OF INVENTION: ANTIBODY GENE TRANSFER AND RECOMBINANT AAV THEREFOR
;  FILE REFERENCE: 28335/39282
;  CURRENT APPLICATION NUMBER: US/10/409,938
;  CURRENT FILING DATE:  2003-04-09
;  PRIOR APPLICATION NUMBER: US 60/371,501
;  PRIOR FILING DATE: 2002-04-09
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 15
;   LENGTH: 476
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-409-938-15

  Query Match           100.0%;  Score 1263;  DB 15;  Length 476;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 111
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US-10-108-260A-4288
; Sequence 4288, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20040005560A1el full length cDNA
;  FILE REFERENCE: H1-A0106
;  CURRENT APPLICATION NUMBER: US/10/108,260A
;  CURRENT FILING DATE:  2002-03-27
;  NUMBER OF SEQ ID NOS: 5458
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4288
;   LENGTH: 476
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-108-260A-4288

  Query Match            100.0%;  Score 1263;  DB 15;  Length 476;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        245 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 304

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        305 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 364

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        365 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 424

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 476


RESULT 112
US-10-108-260A-4289
; Sequence 4289, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
;  APPLICANT: HELIX RESEARCH INSTITUTE
;  TITLE OF INVENTION: No. US20040005560A1el full length cDNA
;  FILE REFERENCE: H1-A0106
;  CURRENT APPLICATION NUMBER: US/10/108,260A
;  CURRENT FILING DATE:  2002-03-27
;  NUMBER OF SEQ ID NOS: 5458
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4289
;   LENGTH: 477
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-108-260A-4289

  Query Match            100.0%;  Score 1263;  DB 15;  Length 477;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        246 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 305

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        306 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 365

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        366 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 425

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        426 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 477


RESULT 113
US-09-758-173-8
; Sequence 8, Application US/09758173
; Publication No. US20010024648A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/758,173
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 478 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-758-173-8

  Query Match            100.0%;  Score 1263;  DB 9;  Length 478;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 114
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```
US-09-948-429B-8
; Sequence 8, Application US/09948429B
; Patent No. US20020177689A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/948,429B
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 478 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-948-429B-8

  Query Match             100.0%;  Score 1263;  DB 9;  Length 478;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 115
US-10-124-905-8
; Sequence 8, Application US/10124905
; Publication No. US20020166136A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/124,905
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 478 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-10-124-905-8

  Query Match             100.0%;  Score 1263;  DB 13;  Length 478;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 116
US-10-124-807-8
; Sequence 8, Application US/10124807
; Publication No. US20030166207A1
;  GENERAL INFORMATION:
;    APPLICANT:  Anderson, Darrell R.
;    TITLE OF INVENTION:  "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
;    TITLE OF INVENTION:  TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
;    TITLE OF INVENTION:  PHARMACEUTIAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
;    TITLE OF INVENTION:  IMMUNOSUPPRESANTS"
;    NUMBER OF SEQUENCES:  12
```

```
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BURNS, DOANE, SWECKER & MATHIS
;      STREET:  699 Prince Street
;      CITY:  Alexandria
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/124,807
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  09/383,916
;      FILING DATE:
;      APPLICATION NUMBER:  US 08/487,550
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Teskin, Robin L.
;      REGISTRATION NUMBER:  35,030
;      REFERENCE/DOCKET NUMBER:  012712-131
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-836-6620
;      TELEFAX:  703-836-2021
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 478 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-10-124-807-8

  Query Match             100.0%;  Score 1263;  DB 14;  Length 478;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 117
US-10-291-532-8
; Sequence 8, Application US/10291532
; Publication No. US20030180290A1
; GENERAL INFORMATION:
;  APPLICANT: HARIHARAN, KANDASAMY
;  APPLICANT:  HANNA, NABIL
;  TITLE OF INVENTION: ANTI-CD80 ANTIBODY HAVING ADCC ACTIVITY FOR ADCC
;  TITLE OF INVENTION:  MEDIATED KILLING OF B CELL LYMPHOMA CELLS ALONE OR IN
;  TITLE OF INVENTION:  COMBINATION WITH OTHER THERAPIES
;  FILE REFERENCE: 037003/291872
;  CURRENT APPLICATION NUMBER: US/10/291,532
;  CURRENT FILING DATE:  2002-11-12
;  PRIOR APPLICATION NUMBER: 60/331,187
;  PRIOR FILING DATE: 2001-11-09
;  PRIOR APPLICATION NUMBER: 09/758,173
;  PRIOR FILING DATE: 2001-01-12
;  PRIOR APPLICATION NUMBER: 09/383,916
;  PRIOR FILING DATE: 1999-08-26
;  PRIOR APPLICATION NUMBER: 08/487,950
;  PRIOR FILING DATE: 1995-06-07
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 8
;   LENGTH: 478
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: primatized peptide sequence
US-10-291-532-8

  Query Match             100.0%;  Score 1263;  DB 14;  Length 478;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        247 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 306

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        307 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 366

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        367 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 426

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        427 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 478


RESULT 118
US-09-875-338-5
; Sequence 5, Application US/09875338
; Patent No. US20020095024A1
; GENERAL INFORMATION:
;  APPLICANT: MIKESELL, GLEN E.
;  APPLICANT:  CHANG, HAN
;  APPLICANT:  FINGER, JOSHUA N.
;  APPLICANT:  YANG, GUCHEN
;  APPLICANT:  LU, PIN
;  APPLICANT:  ZHOU, XIA-DI
;  APPLICANT:  PEACH, ROBERT
;  TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
;  TITLE OF INVENTION:  IMMUNOMODULATION
;  FILE REFERENCE: 3053-4071US2
;  CURRENT APPLICATION NUMBER: US/09/875,338
;  CURRENT FILING DATE:  2001-06-06
;  PRIOR APPLICATION NUMBER: 60/272,107
;  PRIOR FILING DATE: 2001-02-28
;  PRIOR APPLICATION NUMBER: 60/209,811
;  PRIOR FILING DATE: 2000-06-06
;  NUMBER OF SEQ ID NOS: 94
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
;   LENGTH: 480
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: fusion construct
US-09-875-338-5

  Query Match             100.0%;  Score 1263;  DB 9;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 119
US-10-077-023-5
; Sequence 5, Application US/10077023
; Publication No. US20030031675A1
; GENERAL INFORMATION:
;  APPLICANT: MIKESELL, GLEN E.
;  APPLICANT:  CHANG, HAN
;  APPLICANT:  FINGER, JOSHUA N.
;  APPLICANT:  YANG, GUCHEN
;  APPLICANT:  LU, PIN
;  APPLICANT:  ZHOU, XIA-DI
;  APPLICANT:  PEACH, ROBERT
;  TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
;  TITLE OF INVENTION:  IMMUNOMODULATION
;  FILE REFERENCE: 3053-4071US3
;  CURRENT APPLICATION NUMBER: US/10/077,023
;  CURRENT FILING DATE:  2002-02-15
;  PRIOR APPLICATION NUMBER: 60/272,107
;  PRIOR FILING DATE: 2001-02-28
;  PRIOR APPLICATION NUMBER: 60/209,811
;  PRIOR FILING DATE: 2000-06-06
;  NUMBER OF SEQ ID NOS: 138
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
;   LENGTH: 480
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: fusion construct
US-10-077-023-5

  Query Match             100.0%;  Score 1263;  DB 14;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 120
US-10-077-023-133
; Sequence 133, Application US/10077023
; Publication No. US20030031675A1
; GENERAL INFORMATION:
;  APPLICANT: MIKESELL, GLEN E.
;  APPLICANT:  CHANG, HAN
;  APPLICANT:  FINGER, JOSHUA N.
;  APPLICANT:  YANG, GUCHEN
;  APPLICANT:  LU, PIN
;  APPLICANT:  ZHOU, XIA-DI
;  APPLICANT:  PEACH, ROBERT
;  TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
;  TITLE OF INVENTION:  IMMUNOMODULATION
;  FILE REFERENCE: 3053-4071US3
;  CURRENT APPLICATION NUMBER: US/10/077,023
;  CURRENT FILING DATE:  2002-02-15
;  PRIOR APPLICATION NUMBER: 60/272,107
;  PRIOR FILING DATE: 2001-02-28
;  PRIOR APPLICATION NUMBER: 60/209,811
;  PRIOR FILING DATE: 2000-06-06
;  NUMBER OF SEQ ID NOS: 138
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 133
;   LENGTH: 480
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-077-023-133

  Query Match             100.0%;  Score 1263;  DB 14;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 121
US-10-077-023-135
; Sequence 135, Application US/10077023
; Publication No. US20030031675A1
; GENERAL INFORMATION:
;  APPLICANT: MIKESELL, GLEN E.
;  APPLICANT:  CHANG, HAN
;  APPLICANT:  FINGER, JOSHUA N.
;  APPLICANT:  YANG, GUCHEN
;  APPLICANT:  LU, PIN
;  APPLICANT:  ZHOU, XIA-DI
;  APPLICANT:  PEACH, ROBERT
;  TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
;  TITLE OF INVENTION:  IMMUNOMODULATION
;  FILE REFERENCE: 3053-4071US3
;  CURRENT APPLICATION NUMBER: US/10/077,023
;  CURRENT FILING DATE:  2002-02-15
;  PRIOR APPLICATION NUMBER: 60/272,107
;  PRIOR FILING DATE: 2001-02-28
;  PRIOR APPLICATION NUMBER: 60/209,811
;  PRIOR FILING DATE: 2000-06-06
;  NUMBER OF SEQ ID NOS: 138
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 135
;   LENGTH: 480
;   TYPE: PRT
```

```
;   ORGANISM: Homo sapiens
US-10-077-023-135

  Query Match            100.0%;  Score 1263;  DB 14;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 308

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 368

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        369 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 428

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 480


RESULT 122
US-10-468-333-7
; Sequence 7, Application US/10468333
; Publication No. US20040076992A1
; GENERAL INFORMATION:
;  APPLICANT: Nakamura, Yusuke
;  APPLICANT:  Sugano, Sumio
;  APPLICANT:  Kato, Yutaka
;  APPLICANT:  Takahashi, Tomohiro
;  APPLICANT:  Shirakawa, Kamon
;  TITLE OF INVENTION: Novel Cell Adhesion Molecule of Activated Leukocyte
;  FILE REFERENCE: 03-775
;  CURRENT APPLICATION NUMBER: US/10/468,333
;  CURRENT FILING DATE:  2003-08-15
;  PRIOR APPLICATION NUMBER: PCT/JP02/01321
;  PRIOR FILING DATE: 2002-02-15
;  PRIOR APPLICATION NUMBER: JP 2001-39196
;  PRIOR FILING DATE: 2001-02-15
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
;   LENGTH: 489
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
;   OTHER INFORMATION: HRC12337-Fc fusion protein
US-10-468-333-7

  Query Match            100.0%;  Score 1263;  DB 15;  Length 489;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        258 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 317

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        318 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 377

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        378 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 437

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        438 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 489


RESULT 123
US-10-207-655-344
; Sequence 344, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
;  APPLICANT: Ledbetter, Jeffrey A.
;  APPLICANT:  Hayden-Ledbetter, Martha S.
;  TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
;  FILE REFERENCE: 390069.401C1
;  CURRENT APPLICATION NUMBER: US/10/207,655
;  CURRENT FILING DATE:  2002-07-25
;  NUMBER OF SEQ ID NOS: 426
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 344
;   LENGTH: 492
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: fusion polypeptide
US-10-207-655-344

  Query Match            100.0%;  Score 1263;  DB 14;  Length 492;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        261 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 320

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        321 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 380

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        381 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 440

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        441 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 492


RESULT 124
US-10-683-255-6
; Sequence 6, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
;  APPLICANT: Kavanaugh, William M.
;  APPLICANT:  Ballinger, Marcus
;  TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
;  TITLE OF INVENTION:  RECEPTOR-IMMUNOGLOBULIN FUSION
;  FILE REFERENCE: PP01474.101
;  CURRENT APPLICATION NUMBER: US/10/683,255
;  CURRENT FILING DATE:  2003-10-10
;  PRIOR APPLICATION NUMBER: 09/499,846
;  PRIOR FILING DATE: 2000-02-07
;  PRIOR APPLICATION NUMBER: 60/119,002
;  PRIOR FILING DATE: 1999-02-08
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 6
;   LENGTH: 497
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-683-255-6

  Query Match            100.0%;  Score 1263;  DB 15;  Length 497;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 325
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Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         326 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 385

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         386 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 445

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         446 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 497


RESULT 125
US-10-207-655-15
; Sequence 15, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
;  APPLICANT: Ledbetter, Jeffrey A.
;  APPLICANT:  Hayden-Ledbetter, Martha S.
;  TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
;  FILE REFERENCE: 390069.401C1
;  CURRENT APPLICATION NUMBER: US/10/207,655
;  CURRENT FILING DATE:  2002-07-25
;  NUMBER OF SEQ ID NOS: 426
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 15
;   LENGTH: 499
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: MOUSE-HUMAN HYBRID FUSION PROTEIN
;   FEATURE:
;   NAME/KEY: SITE
;   LOCATION: (1)..(265)
;   OTHER INFORMATION: MOUSE ANTI-HUMAN CD20 SCFV:  2H7
;   FEATURE:
;   NAME/KEY: DOMAIN
;   LOCATION: (266)..(499)
;   OTHER INFORMATION: HUMAN IGG1 WILD TYPE HINGE, CH2, CH3 FC
US-10-207-655-15

  Query Match             100.0%;  Score 1263;  DB 14;  Length 499;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         268 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         328 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 387

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 447

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         448 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 499


RESULT 126
US-10-207-655-148
; Sequence 148, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
;  APPLICANT: Ledbetter, Jeffrey A.
;  APPLICANT:  Hayden-Ledbetter, Martha S.
;  TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
;  FILE REFERENCE: 390069.401C1
;  CURRENT APPLICATION NUMBER: US/10/207,655
;  CURRENT FILING DATE:  2002-07-25
;  NUMBER OF SEQ ID NOS: 426
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 148
;   LENGTH: 499
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Mouse-Human hybrid fusion protein
US-10-207-655-148

  Query Match             100.0%;  Score 1263;  DB 14;  Length 499;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         268 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         328 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 387

Qy         121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 447

Qy         181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         448 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 499


RESULT 127
US-10-053-530-15
; Sequence 15, Application US/10053530
; Publication No. US20030133939A1
; GENERAL INFORMATION:
;  APPLICANT: Ledbetter, Jeffrey
;  APPLICANT:  Hayden-Ledbetter, Martha
;  TITLE OF INVENTION: Binding Domain-Immunoglobulin Fusion Proteins
;  FILE REFERENCE: 390069.401
;  CURRENT APPLICATION NUMBER: US/10/053,530
;  CURRENT FILING DATE:  2002-01-17
;  PRIOR APPLICATION NUMBER: US 09/765,208
;  PRIOR FILING DATE: 2001-01-17
;  NUMBER OF SEQ ID NOS: 38
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 15
;   LENGTH: 499
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: MOUSE-HUMAN HYBRID FUSION PROTEIN
;   NAME/KEY: SITE
;   LOCATION: (1)..(265)
;   OTHER INFORMATION: MOUSE ANTI-HUMAN CD20 SCFV:  2H7
;   NAME/KEY: DOMAIN
;   LOCATION: (266)..(499)
;   OTHER INFORMATION: HUMAN IGG1 WILD TYPE HINGE, CH2, CH3 FC
US-10-053-530-15

  Query Match             100.0%;  Score 1263;  DB 14;  Length 499;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         268 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 327

Qy          61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         328 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 387
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Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        388 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 447

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        448 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 499


RESULT 128
US-10-207-655-240
; Sequence 240, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
;  APPLICANT: Ledbetter, Jeffrey A.
;  APPLICANT:  Hayden-Ledbetter, Martha S.
;  TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
;  FILE REFERENCE: 390069.401C1
;  CURRENT APPLICATION NUMBER: US/10/207,655
;  CURRENT FILING DATE:  2002-07-25
;  NUMBER OF SEQ ID NOS: 426
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 240
;   LENGTH: 500
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: fusion polypeptide
US-10-207-655-240

  Query Match             100.0%;  Score 1263;  DB 14;  Length 500;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        269 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 328

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        329 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 388

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        389 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 448

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        449 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 500


RESULT 129
US-10-207-655-348
; Sequence 348, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
;  APPLICANT: Ledbetter, Jeffrey A.
;  APPLICANT:  Hayden-Ledbetter, Martha S.
;  TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
;  FILE REFERENCE: 390069.401C1
;  CURRENT APPLICATION NUMBER: US/10/207,655
;  CURRENT FILING DATE:  2002-07-25
;  NUMBER OF SEQ ID NOS: 426
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 348
;   LENGTH: 504
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: fusion polypeptide
US-10-207-655-348

  Query Match             100.0%;  Score 1263;  DB 14;  Length 504;
  Best Local Similarity   100.0%;  Pred. No. 2.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        273 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 332

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        333 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 392

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        393 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 452

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        453 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 504


RESULT 130
US-10-683-255-4
; Sequence 4, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
;  APPLICANT: Kavanaugh, William M.
;  APPLICANT:  Ballinger, Marcus
;  TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
;  TITLE OF INVENTION:  RECEPTOR-IMMUNOGLOBULIN FUSION
;  FILE REFERENCE: PP01474.101
;  CURRENT APPLICATION NUMBER: US/10/683,255
;  CURRENT FILING DATE:  2003-10-10
;  PRIOR APPLICATION NUMBER: 09/499,846
;  PRIOR FILING DATE: 2000-02-07
;  PRIOR APPLICATION NUMBER: 60/119,002
;  PRIOR FILING DATE: 1999-02-08
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 525
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-683-255-4

  Query Match             100.0%;  Score 1263;  DB 15;  Length 525;
  Best Local Similarity   100.0%;  Pred. No. 2.7e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        294 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 353

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 413

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 473

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        474 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 525


RESULT 131
US-10-471-151-32
; Sequence 32, Application US/10471151
; Publication No. US20040086908A1
; GENERAL INFORMATION:
;  APPLICANT: Chandrasekher, Yasmin A.
;  APPLICANT:  Novak, Julia E.
```

```
;  APPLICANT:  Foster, Donald C.
;  APPLICANT:  Wenfeng, Xu
;  APPLICANT:  Jaspers Stephen R.
;  TITLE OF INVENTION: Soluble Heterodimeric Cytokine Receptor
;  FILE REFERENCE: 01-10PC
;  CURRENT APPLICATION NUMBER: US/10/471,151
;  CURRENT FILING DATE:  2003-09-08
;  PRIOR APPLICATION NUMBER: 60/274,560
;  PRIOR FILING DATE: 2001-03-09
;  PRIOR APPLICATION NUMBER: 60/299,865
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 40
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 32
;   LENGTH: 541
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-471-151-32

  Query Match             100.0%;  Score 1263;  DB 15;  Length 541;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        310 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 369

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        370 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 429

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        430 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 489

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        490 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 541


RESULT 132
US-10-207-655-345
; Sequence 345, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
;  APPLICANT: Ledbetter, Jeffrey A.
;  APPLICANT:  Hayden-Ledbetter, Martha S.
;  TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
;  FILE REFERENCE: 390069.401C1
;  CURRENT APPLICATION NUMBER: US/10/207,655
;  CURRENT FILING DATE:  2002-07-25
;  NUMBER OF SEQ ID NOS: 426
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 345
;   LENGTH: 543
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: fusion polypeptide
US-10-207-655-345

  Query Match             100.0%;  Score 1263;  DB 14;  Length 543;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        261 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 320

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        321 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 380

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        381 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 440

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        441 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 492


RESULT 133
US-09-746-359A-54
; Sequence 54, Application US/09746359A
; Patent No. US20020042366A1
; GENERAL INFORMATION:
;  APPLICANT: Thompson, Penny
;  APPLICANT:  Foster, Donald C.
;  APPLICANT:  Xu, Wenfeng
;  APPLICANT:  Madden, Karen L.
;  APPLICANT:  Kelly, James D.
;  APPLICANT:  Sprecher, Cindy A.
;  APPLICANT:  Blumberg, Hal
;  APPLICANT:  Eagan, Maribeth A.
;  APPLICANT:  Jaspers, Stephen R.
;  APPLICANT:  Chandrasekher, Yasmin A.
;  APPLICANT:  No. US20020042366A1ak, Julia E.
;  TITLE OF INVENTION: Method for Treating Inflammation
;  FILE REFERENCE: 99-108
;  CURRENT APPLICATION NUMBER: US/09/746,359A
;  CURRENT FILING DATE:  2001-05-21
;  PRIOR APPLICATION NUMBER: 60/171,969
;  PRIOR FILING DATE: 1999-12-23
;  PRIOR APPLICATION NUMBER: 60/213,341
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 72
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 54
;   LENGTH: 547
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-746-359A-54

  Query Match             100.0%;  Score 1263;  DB 9;  Length 547;
  Best Local Similarity   100.0%;  Pred. No. 2.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        316 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 375

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        376 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 435

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        436 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 495

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        496 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 547


RESULT 134
US-09-951-268-40
; Sequence 40, Application US/09951268
; Publication No. US20020085992A1
; GENERAL INFORMATION:
;  APPLICANT: Chandrasekher, Yasmin A.
;  APPLICANT:  Jaspers, Stephen R.
;  TITLE OF INVENTION: Method for Treating Inflammation
;  FILE REFERENCE: 00-88
;  CURRENT APPLICATION NUMBER: US/09/951,268
;  CURRENT FILING DATE:  2001-09-13
```

```
;  PRIOR APPLICATION NUMBER: 60/233,305
;  PRIOR FILING DATE: 2000-09-15
;  NUMBER OF SEQ ID NOS: 42
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
;   LENGTH: 547
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-951-268-40

  Query Match           100.0%;  Score 1263;  DB 9;  Length 547;
  Best Local Similarity  100.0%;  Pred. No. 2.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        316 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 375

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        376 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 435

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        436 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 495

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        496 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 547


RESULT 135
US-09-745-792A-54
; Sequence 54, Application US/09745792A
; Publication No. US20050003475A1
; GENERAL INFORMATION:
;  APPLICANT: Foster, Donald C.
;  APPLICANT:  Xu, Wenfeng
;  APPLICANT:  Madden, Karen L.
;  APPLICANT:  Kelly, James D.
;  APPLICANT:  Sprecher, Cindy A.
;  APPLICANT:  Brandt, Cameron S.
;  APPLICANT:  Rixon, Mark W.
;  APPLICANT:  Presnell, Scott R.
;  APPLICANT:  Fox, Brian A.
;  TITLE OF INVENTION: Soluble Interleukin-20 Receptor
;  FILE REFERENCE: 99-107
;  CURRENT APPLICATION NUMBER: US/09/745,792A
;  CURRENT FILING DATE:  2000-12-22
;  PRIOR APPLICATION NUMBER: 60/171,966
;  PRIOR FILING DATE: 1999-12-23
;  PRIOR APPLICATION NUMBER: 60/213,416
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 72
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 54
;   LENGTH: 547
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-745-792A-54

  Query Match           100.0%;  Score 1263;  DB 11;  Length 547;
  Best Local Similarity  100.0%;  Pred. No. 2.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        316 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 375

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        376 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 435

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        436 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 495

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        496 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 547


RESULT 136
US-10-424-658-54
; Sequence 54, Application US/10424658
; Publication No. US20040005320A1
; GENERAL INFORMATION:
;  APPLICANT: Thompson, Penny
;  APPLICANT:  Foster, Donald C.
;  APPLICANT:  Xu, Wenfeng
;  APPLICANT:  Blumberg, Hal
;  APPLICANT:  Chandrasekher, Yasmin A.
;  TITLE OF INVENTION: Method for Treating Inflammation
;  FILE REFERENCE: 99-108D1
;  CURRENT APPLICATION NUMBER: US/10/424,658
;  CURRENT FILING DATE:  2003-04-28
;  PRIOR APPLICATION NUMBER: 60/171,969
;  PRIOR FILING DATE: 1999-12-23
;  PRIOR APPLICATION NUMBER: 60/213,341
;  PRIOR FILING DATE: 2000-06-22
;  PRIOR APPLICATION NUMBER: 09/ 746,359
;  PRIOR FILING DATE: 2000-12-22
;  NUMBER OF SEQ ID NOS: 72
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 54
;   LENGTH: 547
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-424-658-54

  Query Match           100.0%;  Score 1263;  DB 15;  Length 547;
  Best Local Similarity  100.0%;  Pred. No. 2.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        316 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 375

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        376 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 435

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        436 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 495

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        496 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 547


RESULT 137
US-09-773-877A-14
; Sequence 14, Application US/09773877A
; Publication No. US20030017977A1
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877A
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 14
;   LENGTH: 557
;   TYPE: PRT
```

```
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Flt1(1-3 deltaB)-Fc (Mut1)
US-09-773-877A-14

  Query Match             100.0%;  Score 1263;  DB 10;  Length 557;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 385

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 445

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        446 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 505

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        506 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 557


RESULT 138
US-10-471-151-31
; Sequence 31, Application US/10471151
; Publication No. US20040086908A1
; GENERAL INFORMATION:
;  APPLICANT: Chandrasekher, Yasmin A.
;  APPLICANT:  Novak, Julia E.
;  APPLICANT:  Foster, Donald C.
;  APPLICANT:  Wenfeng, Xu
;  APPLICANT:  Jaspers Stephen R.
;  TITLE OF INVENTION: Soluble Heterodimeric Cytokine Receptor
;  FILE REFERENCE: 01-10PC
;  CURRENT APPLICATION NUMBER: US/10/471,151
;  CURRENT FILING DATE:  2003-09-08
;  PRIOR APPLICATION NUMBER: 60/274,560
;  PRIOR FILING DATE: 2001-03-09
;  PRIOR APPLICATION NUMBER: 60/299,865
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 40
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 31
;   LENGTH: 558
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-471-151-31

  Query Match             100.0%;  Score 1263;  DB 15;  Length 558;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        327 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 386

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        387 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 446

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        447 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 506

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        507 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 558


RESULT 139
US-09-825-561A-16
; Sequence 16, Application US/09825561A
; Patent No. US20020137677A1
; GENERAL INFORMATION:
;  APPLICANT: Sprecher, Cindy A.
;  APPLICANT:  No. US20020137677A1ak, Julia E.
;  APPLICANT:  West, James W.
;  APPLICANT:  Presnell, Scott R.
;  APPLICANT:  Holly, Richard D.
;  APPLICANT:  Nelson, Andrew J.
;  TITLE OF INVENTION: SOLUBLE ZALPHA11 CYTOKINE RECEPTORS
;  FILE REFERENCE: 00-22
;  CURRENT APPLICATION NUMBER: US/09/825,561A
;  CURRENT FILING DATE:  2000-04-05
;  PRIOR APPLICATION NUMBER: US 60/194,731
;  PRIOR FILING DATE: 2000-04-05
;  PRIOR APPLICATION NUMBER: US 60/222,121
;  PRIOR FILING DATE: 2000-07-28
;  NUMBER OF SEQ ID NOS: 86
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 16
;   LENGTH: 567
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: soluble zalpha11R/IgGgamma1 polypeptide
US-09-825-561A-16

  Query Match             100.0%;  Score 1263;  DB 9;  Length 567;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 455

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 515

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567


RESULT 140
US-09-773-877A-12
; Sequence 12, Application US/09773877A
; Publication No. US20030017977A1
; GENERAL INFORMATION:
;  APPLICANT: Xia, Yu-Ping et al.
;  TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
;  FILE REFERENCE: REG 710b
;  CURRENT APPLICATION NUMBER: US/09/773,877A
;  CURRENT FILING DATE:  2001-01-31
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 12
;   LENGTH: 567
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Flt(1-3)-Fc
US-09-773-877A-12

  Query Match             100.0%;  Score 1263;  DB 10;  Length 567;
  Best Local Similarity   100.0%;  Pred. No. 2.9e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 455

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 515

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567
```

RESULT 141
US-09-773-877A-20
; Sequence 20, Application US/09773877A
; Publication No. US20030017977A1
; GENERAL INFORMATION:
; APPLICANT: Xia, Yu-Ping et al.
; TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
; FILE REFERENCE: REG 710b
; CURRENT APPLICATION NUMBER: US/09/773,877A
; CURRENT FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 567
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Flt1(1-3 R->N)-Fc (Mut4)
US-09-773-877A-20

Query Match 100.0%; Score 1263; DB 10; Length 567;
Best Local Similarity 100.0%; Pred. No. 2.9e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 395

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 455

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 515

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 567
```

RESULT 142
US-09-746-359A-53
; Sequence 53, Application US/09746359A
; Patent No. US20020042366A1
; GENERAL INFORMATION:
; APPLICANT: Thompson, Penny
; APPLICANT: Foster, Donald C.
; APPLICANT: Xu, Wenfeng
; APPLICANT: Madden, Karen L.
; APPLICANT: Kelly, James D.
; APPLICANT: Sprecher, Cindy A.
; APPLICANT: Blumberg, Hal
; APPLICANT: Eagan, Maribeth A.
; APPLICANT: Jaspers, Stephen R.
; APPLICANT: Chandrasekher, Yasmin A.
; APPLICANT: No. US20020042366A1ak, Julia E.
; TITLE OF INVENTION: Method for Treating Inflammation
; FILE REFERENCE: 99-108
; CURRENT APPLICATION NUMBER: US/09/746,359A
; CURRENT FILING DATE: 2001-05-21
; PRIOR APPLICATION NUMBER: 60/171,969
; PRIOR FILING DATE: 1999-12-23
; PRIOR APPLICATION NUMBER: 60/213,341
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 571
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-746-359A-53

Query Match 100.0%; Score 1263; DB 9; Length 571;
Best Local Similarity 100.0%; Pred. No. 3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 399

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 459

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        460 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 519

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        520 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 571
```

RESULT 143
US-09-951-268-30
; Sequence 30, Application US/09951268
; Publication No. US20020085992A1
; GENERAL INFORMATION:
; APPLICANT: Chandrasekher, Yasmin A.
; APPLICANT: Jaspers, Stephen R.
; TITLE OF INVENTION: Method for Treating Inflammation
; FILE REFERENCE: 00-88
; CURRENT APPLICATION NUMBER: US/09/951,268
; CURRENT FILING DATE: 2001-09-13
; PRIOR APPLICATION NUMBER: 60/233,305
; PRIOR FILING DATE: 2000-09-15
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 30
; LENGTH: 571
; TYPE: PRT
; ORGANISM: homo sapiens
US-09-951-268-30

Query Match 100.0%; Score 1263; DB 9; Length 571;
Best Local Similarity 100.0%; Pred. No. 3e-92;
Matches 232; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 399

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 459

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        460 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 519

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        520 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 571


RESULT 144
US-09-745-792A-53
; Sequence 53, Application US/09745792A
; Publication No. US20050003475A1
; GENERAL INFORMATION:
;  APPLICANT: Foster, Donald C.
;  APPLICANT:  Xu, Wenfeng
;  APPLICANT:  Madden, Karen L.
;  APPLICANT:  Kelly, James D.
;  APPLICANT:  Sprecher, Cindy A.
;  APPLICANT:  Brandt, Cameron S.
;  APPLICANT:  Rixon, Mark W.
;  APPLICANT:  Presnell, Scott R.
;  APPLICANT:  Fox, Brian A.
;  TITLE OF INVENTION: Soluble Interleukin-20 Receptor
;  FILE REFERENCE: 99-107
;  CURRENT APPLICATION NUMBER: US/09/745,792A
;  CURRENT FILING DATE:  2000-12-22
;  PRIOR APPLICATION NUMBER: 60/171,966
;  PRIOR FILING DATE: 1999-12-23
;  PRIOR APPLICATION NUMBER: 60/213,416
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 72
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
;   LENGTH: 571
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-745-792A-53

  Query Match             100.0%;  Score 1263;  DB 11;  Length 571;
  Best Local Similarity   100.0%;  Pred. No. 3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 399

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 459

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        460 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 519

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        520 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 571


RESULT 145
US-10-424-658-53
; Sequence 53, Application US/10424658
; Publication No. US20040005320A1
; GENERAL INFORMATION:
;  APPLICANT: Thompson, Penny
;  APPLICANT:  Foster, Donald C.
;  APPLICANT:  Xu, Wenfeng
;  APPLICANT:  Blumberg, Hal
;  APPLICANT:  Chandrasekher, Yasmin A.
;  TITLE OF INVENTION: Method for Treating Inflammation
;  FILE REFERENCE: 99-108D1
;  CURRENT APPLICATION NUMBER: US/10/424,658
;  CURRENT FILING DATE:  2003-04-28
;  PRIOR APPLICATION NUMBER: 60/171,969
;  PRIOR FILING DATE: 1999-12-23
;  PRIOR APPLICATION NUMBER: 60/213,341
;  PRIOR FILING DATE: 2000-06-22
;  PRIOR APPLICATION NUMBER: 09/ 746,359
;  PRIOR FILING DATE: 2000-12-22
;  NUMBER OF SEQ ID NOS: 72
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
;   LENGTH: 571
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-424-658-53

  Query Match             100.0%;  Score 1263;  DB 15;  Length 571;
  Best Local Similarity   100.0%;  Pred. No. 3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        340 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 399

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        400 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 459

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        460 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 519

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        520 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 571


RESULT 146
US-09-886-404-22
; Sequence 22, Application US/09886404
; Patent No. US20020037524A1
; GENERAL INFORMATION:
;  APPLICANT: Medlock, Eugene
;  APPLICANT:  Yeh, Richard
;  APPLICANT:  Silbiger, Scott M.
;  APPLICANT:  Elliot, Gary S.
;  APPLICANT:  Nguyen, Hung Q.
;  APPLICANT:  Jing, Shuqian
;  TITLE OF INVENTION: IL-17 Like Molecules and Uses Thereof
;  FILE REFERENCE: 01017/37128B
;  CURRENT APPLICATION NUMBER: US/09/886,404
;  CURRENT FILING DATE:  2001-06-21
;  PRIOR APPLICATION NUMBER: 09/810,384
;  PRIOR FILING DATE: 2001-03-16
;  PRIOR APPLICATION NUMBER: 60/266,159
;  PRIOR FILING DATE: 2001-02-02
;  PRIOR APPLICATION NUMBER: 60/213,125
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 22
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
;   LENGTH: 585
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-886-404-22

  Query Match             100.0%;  Score 1263;  DB 9;  Length 585;
  Best Local Similarity   100.0%;  Pred. No. 3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 413

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
```

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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 473

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        474 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 533

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        534 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 585


RESULT 147
US-10-037-591A-22
; Sequence 22, Application US/10037591A
; Publication No. US20030124092A1
; GENERAL INFORMATION:
;  APPLICANT: Medlock, Eugene
;  APPLICANT:  Yeh, Richard
;  APPLICANT:  Silbiger, Scott M.
;  APPLICANT:  Elliot, Gary S.
;  APPLICANT:  Nguyen, Hung Q.
;  APPLICANT:  Jing, Shuqian
;  TITLE OF INVENTION: IL-17 Like Molecules and Uses Thereof
;  FILE REFERENCE: 01017/37128C
;  CURRENT APPLICATION NUMBER: US/10/037,591A
;  CURRENT FILING DATE:  2002-06-24
;  PRIOR APPLICATION NUMBER: 09/886,404
;  PRIOR FILING DATE: 2001-06-21
;  PRIOR APPLICATION NUMBER: 09/810,384
;  PRIOR FILING DATE: 2001-03-16
;  PRIOR APPLICATION NUMBER: 60/266,159
;  PRIOR FILING DATE: 2001-02-02
;  PRIOR APPLICATION NUMBER: 60/213,125
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 24
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
;   LENGTH: 585
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-037-591A-22

  Query Match             100.0%;  Score 1263;  DB 14;  Length 585;
  Best Local Similarity   100.0%;  Pred. No. 3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 413

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 473

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        474 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 533

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        534 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 585


RESULT 148
US-10-846-352-22
; Sequence 22, Application US/10846352
; Publication No. US20050003451A1
; GENERAL INFORMATION:
;  APPLICANT: Medlock, Eugene
;  APPLICANT:  Yeh, Richard
;  APPLICANT:  Silbiger, Scott M.
;  APPLICANT:  Elliot, Gary S.
;  APPLICANT:  Nguyen, Hung Q.
;  APPLICANT:  Jing, Shuqian
;  TITLE OF INVENTION: IL 17 Like Molecules and Uses Thereof
;  FILE REFERENCE: 01017/37128D
;  CURRENT APPLICATION NUMBER: US/10/846,352
;  CURRENT FILING DATE:  2004-05-13
;  PRIOR APPLICATION NUMBER: 10/037,591
;  PRIOR FILING DATE: 2001-12-21
;  PRIOR APPLICATION NUMBER: 09/886,404
;  PRIOR FILING DATE: 2001 06 21
;  PRIOR APPLICATION NUMBER: 09/810,384
;  PRIOR FILING DATE: 2001 03 16
;  PRIOR APPLICATION NUMBER: 60/266,159
;  PRIOR FILING DATE: 2001 02 02
;  PRIOR APPLICATION NUMBER: 60/213,125
;  PRIOR FILING DATE: 2000 06 22
;  NUMBER OF SEQ ID NOS: 24
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
;   LENGTH: 585
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-846-352-22

  Query Match             100.0%;  Score 1263;  DB 16;  Length 585;
  Best Local Similarity   100.0%;  Pred. No. 3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        354 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 413

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        414 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 473

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        474 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 533

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        534 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 585


RESULT 149
US-09-313-942-8
; Sequence 8, Application US/09313942
; Publication No. US20020012962A1
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-A
;  CURRENT APPLICATION NUMBER: US/09/313,942
;  CURRENT FILING DATE:  1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 32
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 8
;   LENGTH: 592
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-313-942-8

  Query Match             100.0%;  Score 1263;  DB 9;  Length 592;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 540

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 592


RESULT 150
US-09-935-868-8
; Sequence 8, Application US/09935868
; Patent No. US20020164690A1
; GENERAL INFORMATION:
;  APPLICANT: Regeneron Pharmaceuticals, Inc
;  TITLE OF INVENTION: Receptor Based Antagonists, and Methods of Making and Using
;  FILE REFERENCE: REG 203D
;  CURRENT APPLICATION NUMBER: US/09/935,868
;  CURRENT FILING DATE:  2002-04-11
;  PRIOR APPLICATION NUMBER: PCT/US99/22045
;  PRIOR FILING DATE: 1999-09-22
;  NUMBER OF SEQ ID NOS: 52
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
;   LENGTH: 592
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-935-868-8

  Query Match            100.0%;  Score 1263;  DB 9;  Length 592;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 540

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 592


RESULT 151
US-10-287-035-8
; Sequence 8, Application US/10287035
; Publication No. US20030104567A1
; GENERAL INFORMATION:
;  APPLICANT: Neil Stahl and George D. Yancopoulos
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203DA
;  CURRENT APPLICATION NUMBER: US/10/287,035
;  CURRENT FILING DATE:  2002-11-01
;  PRIOR APPLICATION NUMBER: USSN 09/935,868
;  PRIOR FILING DATE: 2001-08-23
;  PRIOR APPLICATION NUMBER: USSN 09/787,835
;  PRIOR FILING DATE: 2001-03-22
;  PRIOR APPLICATION NUMBER: USSN 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 60
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 8
;   LENGTH: 592
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-287-035-8

  Query Match            100.0%;  Score 1263;  DB 14;  Length 592;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 540

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
                ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 592


RESULT 152
US-10-282-162-8
; Sequence 8, Application US/10282162
; Publication No. US20030143697A1
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-B-US
;  CURRENT APPLICATION NUMBER: US/10/282,162
;  CURRENT FILING DATE:  2002-10-28
;  PRIOR APPLICATION NUMBER: 09/787,835
;  PRIOR FILING DATE: 1999-09-22
;  PRIOR APPLICATION NUMBER: PCT/US99/22045
;  PRIOR FILING DATE: 1999-09-22
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 8
;   LENGTH: 592
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-282-162-8

  Query Match            100.0%;  Score 1263;  DB 14;  Length 592;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 420

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 480

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 540
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Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 592


RESULT 153
US-10-334-235-38
; Sequence 38, Application US/10334235
; Publication No. US20040131591A1
; GENERAL INFORMATION:
;  APPLICANT: Oxfard Biomedica (UK) Ltd.
;  APPLICANT:  Kingsman, Alan
;  APPLICANT:  Bebbington, Christopher
;  APPLICANT:  Carroll, Miles
;  APPLICANT:  Ellard, Fiona
;  APPLICANT:  Kingsman, Susan
;  APPLICANT:  Myers, Kevin
;  APPLICANT:  Lamikandra, Abigail
;  TITLE OF INVENTION: VECTOR SYSTEM
;  FILE REFERENCE: 532682000920
;  CURRENT APPLICATION NUMBER: US/10/334,235
;  CURRENT FILING DATE:  2002-12-30
;  PRIOR APPLICATION NUMBER: US 10/060,585
;  PRIOR FILING DATE: 2002-01-29
;  PRIOR APPLICATION NUMBER: PCT/GB00/04317
;  PRIOR FILING DATE: 2000-11-13
;  PRIOR APPLICATION NUMBER: US 09/445,375
;  PRIOR FILING DATE: 1998-06-04
;  NUMBER OF SEQ ID NOS: 40
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 38
;   LENGTH: 600
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: peptide of 5T4Sab1
US-10-334-235-38

  Query Match             100.0%;  Score 1263;  DB 16;  Length 600;
  Best Local Similarity   100.0%;  Pred. No. 3.1e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 423

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 483

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        484 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 543

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        544 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 595


RESULT 154
US-10-363-427-10
; Sequence 10, Application US/10363427
; Publication No. US20030195338A1
; GENERAL INFORMATION:
;  APPLICANT: MeDexGen Inc.
;  APPLICANT:  CHUNG, Yong Hoon
;  APPLICANT:  HAN, Ji Woong
;  APPLICANT:  LEE, Hye Ja
;  APPLICANT:  CHOI, Eun Yong
;  APPLICANT:  KIM, Jin Mi
;  APPLICANT:  YIM, Soo Bin
;  TITLE OF INVENTION: Concatametric Immunoadhesion
;  FILE REFERENCE:
;  CURRENT APPLICATION NUMBER: US/10/363,427
;  CURRENT FILING DATE:  2003-02-28
;  NUMBER OF SEQ ID NOS: 52
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 10
;   LENGTH: 608
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-363-427-10

  Query Match             100.0%;  Score 1263;  DB 14;  Length 608;
  Best Local Similarity   100.0%;  Pred. No. 3.2e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        377 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 436

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        437 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 496

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        497 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 556

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        557 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 608


RESULT 155
US-10-683-255-2
; Sequence 2, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
;  APPLICANT: Kavanaugh, William M.
;  APPLICANT:  Ballinger, Marcus
;  TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
;  TITLE OF INVENTION:  RECEPTOR-IMMUNOGLOBULIN FUSION
;  FILE REFERENCE: PP01474.101
;  CURRENT APPLICATION NUMBER: US/10/683,255
;  CURRENT FILING DATE:  2003-10-10
;  PRIOR APPLICATION NUMBER: 09/499,846
;  PRIOR FILING DATE: 2000-02-07
;  PRIOR APPLICATION NUMBER: 60/119,002
;  PRIOR FILING DATE: 1999-02-08
;  NUMBER OF SEQ ID NOS: 12
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
;   LENGTH: 622
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-683-255-2

  Query Match             100.0%;  Score 1263;  DB 15;  Length 622;
  Best Local Similarity   100.0%;  Pred. No. 3.3e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        391 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 450

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        451 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 510

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        511 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 570

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        571 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 622


RESULT 156
US-10-617-619-8
; Sequence 8, Application US/10617619
; Publication No. US20040110929A1
; GENERAL INFORMATION:
;  APPLICANT: Bjorn, Soren E
;  APPLICANT:  Nicolaisen, Else M
;  APPLICANT:  Jorgensen, Anker S
;  TITLE OF INVENTION: TF Binding Compound
;  FILE REFERENCE: 6455.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,619
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,568
;  PRIOR FILING DATE: 2002-08-19
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
;   LENGTH: 641
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
;   OTHER INFORMATION: Synthetic
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (6)..(7)
;   OTHER INFORMATION: Xaa can be any naturally occurring amino acid
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (14)..(14)
;   OTHER INFORMATION: Xaa can be any naturally occurring amino acid
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (16)..(16)
;   OTHER INFORMATION: Xaa can be any naturally occurring amino acid
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (19)..(20)
;   OTHER INFORMATION: Xaa can be any naturally occurring amino acid
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (25)..(26)
;   OTHER INFORMATION: Xaa can be any naturally occurring amino acid
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (29)..(29)
;   OTHER INFORMATION: Xaa can be any naturally occurring amino acid
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (35)..(35)
;   OTHER INFORMATION: Xaa can be any naturally occurring amino acid
US-10-617-619-8

  Query Match           100.0%;  Score 1263;  DB 16;  Length 641;
  Best Local Similarity  100.0%;  Pred. No. 3.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        410 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 469

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        470 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 529

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        530 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 589

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        590 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 641


RESULT 157
US-10-363-427-12
; Sequence 12, Application US/10363427
; Publication No. US20030195338A1
; GENERAL INFORMATION:
;  APPLICANT: MeDexGen Inc.
;  APPLICANT:  CHUNG, Yong Hoon
;  APPLICANT:  HAN, Ji Woong
;  APPLICANT:  LEE, Hye Ja
;  APPLICANT:  CHOI, Eun Yong
;  APPLICANT:  KIM, Jin Mi
;  APPLICANT:  YIM, Soo Bin
;  TITLE OF INVENTION: Concatametric Immunoadhesion
;  FILE REFERENCE:
;  CURRENT APPLICATION NUMBER: US/10/363,427
;  CURRENT FILING DATE:  2003-02-28
;  NUMBER OF SEQ ID NOS: 52
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 12
;   LENGTH: 659
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-363-427-12

  Query Match           100.0%;  Score 1263;  DB 14;  Length 659;
  Best Local Similarity  100.0%;  Pred. No. 3.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        428 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 487

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        488 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 547

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        548 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 607

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        608 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 659


RESULT 158
US-10-617-619-11
; Sequence 11, Application US/10617619
; Publication No. US20040110929A1
; GENERAL INFORMATION:
;  APPLICANT: Bjorn, Soren E
;  APPLICANT:  Nicolaisen, Else M
;  APPLICANT:  Jorgensen, Anker S
;  TITLE OF INVENTION: TF Binding Compound
;  FILE REFERENCE: 6455.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,619
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,568
;  PRIOR FILING DATE: 2002-08-19
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 11
;   LENGTH: 679
;   TYPE: PRT
;   ORGANISM: Artificial
;   FEATURE:
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;   OTHER INFORMATION: Synthetic
US-10-617-619-11

  Query Match            100.0%;  Score 1263;  DB 16;  Length 679;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        448 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 507

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        508 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 567

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        568 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 627

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        628 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 679


RESULT 159
US-09-875-338-9
; Sequence 9, Application US/09875338
; Patent No. US20020095024A1
; GENERAL INFORMATION:
;  APPLICANT: MIKESELL, GLEN E.
;  APPLICANT:  CHANG, HAN
;  APPLICANT:  FINGER, JOSHUA N.
;  APPLICANT:  YANG, GUCHEN
;  APPLICANT:  LU, PIN
;  APPLICANT:  ZHOU, XIA-DI
;  APPLICANT:  PEACH, ROBERT
;  TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
;  TITLE OF INVENTION:  IMMUNOMODULATION
;  FILE REFERENCE: 3053-4071US2
;  CURRENT APPLICATION NUMBER: US/09/875,338
;  CURRENT FILING DATE:  2001-06-06
;  PRIOR APPLICATION NUMBER: 60/272,107
;  PRIOR FILING DATE: 2001-02-28
;  PRIOR APPLICATION NUMBER: 60/209,811
;  PRIOR FILING DATE: 2000-06-06
;  NUMBER OF SEQ ID NOS: 94
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
;   LENGTH: 698
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: fusion construct
US-09-875-338-9

  Query Match            100.0%;  Score 1263;  DB 9;  Length 698;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        467 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 526

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        527 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 586

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        587 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 646

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        647 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 698


RESULT 160
US-10-077-023-9
; Sequence 9, Application US/10077023
; Publication No. US20030031675A1
; GENERAL INFORMATION:
;  APPLICANT: MIKESELL, GLEN E.
;  APPLICANT:  CHANG, HAN
;  APPLICANT:  FINGER, JOSHUA N.
;  APPLICANT:  YANG, GUCHEN
;  APPLICANT:  LU, PIN
;  APPLICANT:  ZHOU, XIA-DI
;  APPLICANT:  PEACH, ROBERT
;  TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
;  TITLE OF INVENTION:  IMMUNOMODULATION
;  FILE REFERENCE: 3053-4071US3
;  CURRENT APPLICATION NUMBER: US/10/077,023
;  CURRENT FILING DATE:  2002-02-15
;  PRIOR APPLICATION NUMBER: 60/272,107
;  PRIOR FILING DATE: 2001-02-28
;  PRIOR APPLICATION NUMBER: 60/209,811
;  PRIOR FILING DATE: 2000-06-06
;  NUMBER OF SEQ ID NOS: 138
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
;   LENGTH: 698
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: fusion construct
US-10-077-023-9

  Query Match            100.0%;  Score 1263;  DB 14;  Length 698;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        467 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 526

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        527 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 586

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        587 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 646

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        647 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 698


RESULT 161
US-10-617-619-6
; Sequence 6, Application US/10617619
; Publication No. US20040110929A1
; GENERAL INFORMATION:
;  APPLICANT: Bjorn, Soren E
;  APPLICANT:  Nicolaisen, Else M
;  APPLICANT:  Jorgensen, Anker S
;  TITLE OF INVENTION: TF Binding Compound
;  FILE REFERENCE: 6455.200-US
;  CURRENT APPLICATION NUMBER: US/10/617,619
;  CURRENT FILING DATE:  2003-07-11
;  PRIOR APPLICATION NUMBER: Danish Application No. PA 2002 01099
;  PRIOR FILING DATE: 2002-07-12
;  PRIOR APPLICATION NUMBER: US 60/404,568
;  PRIOR FILING DATE: 2002-08-19
```

```
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 6
;   LENGTH: 701
;   TYPE: PRT
;   ORGANISM: Human
US-10-617-619-6

  Query Match             100.0%;  Score 1263;  DB 16;  Length 701;
  Best Local Similarity   100.0%;  Pred. No. 3.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        470 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 529

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        530 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 589

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        590 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 649

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        650 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 701


RESULT 162
US-10-679-620-64
; Sequence 64, Application US/10679620
; Publication No. US20040110930A1
; GENERAL INFORMATION:
;  APPLICANT: Large Scale Biology
;  APPLICANT:  Reinl, Stephen J.
;  APPLICANT:  Edwards, Patricia C.
;  TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
;  FILE REFERENCE: 34150-004A
;  CURRENT APPLICATION NUMBER: US/10/679,620
;  CURRENT FILING DATE:  2003-10-03
;  PRIOR APPLICATION NUMBER: 60/415,940
;  PRIOR FILING DATE: 2002-10-03
;  NUMBER OF SEQ ID NOS: 122
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 64
;   LENGTH: 713
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: p9E10chimericv2-1, see Example 15
US-10-679-620-64

  Query Match             100.0%;  Score 1263;  DB 16;  Length 713;
  Best Local Similarity   100.0%;  Pred. No. 3.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        482 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 541

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        542 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 601

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        602 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 661

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        662 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 713


RESULT 163
US-10-679-620-62
; Sequence 62, Application US/10679620
; Publication No. US20040110930A1
; GENERAL INFORMATION:
;  APPLICANT: Large Scale Biology
;  APPLICANT:  Reinl, Stephen J.
;  APPLICANT:  Edwards, Patricia C.
;  TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
;  FILE REFERENCE: 34150-004A
;  CURRENT APPLICATION NUMBER: US/10/679,620
;  CURRENT FILING DATE:  2003-10-03
;  PRIOR APPLICATION NUMBER: 60/415,940
;  PRIOR FILING DATE: 2002-10-03
;  NUMBER OF SEQ ID NOS: 122
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 62
;   LENGTH: 715
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: p9E10chimericv1-1, see Example 15
US-10-679-620-62

  Query Match             100.0%;  Score 1263;  DB 16;  Length 715;
  Best Local Similarity   100.0%;  Pred. No. 3.9e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        484 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 543

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        544 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 603

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        604 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 663

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        664 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 715


RESULT 164
US-09-825-012-46
; Sequence 46, Application US/09825012
; Patent No. US20020122798A1
; GENERAL INFORMATION:
;  APPLICANT: Young, Robert
;  TITLE OF INVENTION: Compounds for Targeting
;  FILE REFERENCE: 43191-256808
;  CURRENT APPLICATION NUMBER: US/09/825,012
;  CURRENT FILING DATE:  2001-04-03
;  PRIOR APPLICATION NUMBER: US 60/237,159
;  PRIOR FILING DATE: 2000-10-02
;  PRIOR APPLICATION NUMBER: GB 0008049.9
;  PRIOR FILING DATE: 2000-04-03
;  NUMBER OF SEQ ID NOS: 102
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 46
;   LENGTH: 731
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Humanised HMFG1 heavy chain - DNase I fusion
US-09-825-012-46

  Query Match             100.0%;  Score 1263;  DB 9;  Length 731;
  Best Local Similarity   100.0%;  Pred. No. 4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 165
US-09-825-012-55
; Sequence 55, Application US/09825012
; Patent No. US20020122798A1
; GENERAL INFORMATION:
;  APPLICANT: Young, Robert
;  TITLE OF INVENTION: Compounds for Targeting
;  FILE REFERENCE: 43191-256808
;  CURRENT APPLICATION NUMBER: US/09/825,012
;  CURRENT FILING DATE:  2001-04-03
;  PRIOR APPLICATION NUMBER: US 60/237,159
;  PRIOR FILING DATE: 2000-10-02
;  PRIOR APPLICATION NUMBER: GB 0008049.9
;  PRIOR FILING DATE: 2000-04-03
;  NUMBER OF SEQ ID NOS: 102
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 55
;   LENGTH: 741
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Humanised HMFG1 heavy chain - DNase I fusion
US-09-825-012-55

  Query Match             100.0%;  Score 1263;  DB 9;  Length 741;
  Best Local Similarity   100.0%;  Pred. No. 4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        236 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 295

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        296 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 355

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        356 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 415

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        416 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 467


RESULT 166
US-09-313-942-7
; Sequence 7, Application US/09313942
; Publication No. US20020012962A1
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-A
;  CURRENT APPLICATION NUMBER: US/09/313,942
;  CURRENT FILING DATE:  1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 32
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
;   LENGTH: 859
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-313-942-7

  Query Match             100.0%;  Score 1263;  DB 9;  Length 859;
  Best Local Similarity   100.0%;  Pred. No. 4.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        622 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 681

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        682 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 741

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        742 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 801

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        802 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 853


RESULT 167
US-09-935-868-7
; Sequence 7, Application US/09935868
; Patent No. US20020164690A1
; GENERAL INFORMATION:
;  APPLICANT: Regeneron Pharmaceuticals, Inc
;  TITLE OF INVENTION: Receptor Based Antagonists, and Methods of Making and Using
;  FILE REFERENCE: REG 203D
;  CURRENT APPLICATION NUMBER: US/09/935,868
;  CURRENT FILING DATE:  2002-04-11
;  PRIOR APPLICATION NUMBER: PCT/US99/22045
;  PRIOR FILING DATE: 1999-09-22
;  NUMBER OF SEQ ID NOS: 52
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7
;   LENGTH: 859
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-935-868-7

  Query Match             100.0%;  Score 1263;  DB 9;  Length 859;
  Best Local Similarity   100.0%;  Pred. No. 4.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        622 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 681

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        682 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 741

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        742 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 801

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        802 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 853
```

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RESULT 168
US-10-287-035-7
; Sequence 7, Application US/10287035
; Publication No. US20030104567A1
; GENERAL INFORMATION:
;  APPLICANT: Neil Stahl and George D. Yancopoulos
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203DA
;  CURRENT APPLICATION NUMBER: US/10/287,035
;  CURRENT FILING DATE:  2002-11-01
;  PRIOR APPLICATION NUMBER: USSN 09/935,868
;  PRIOR FILING DATE: 2001-08-23
;  PRIOR APPLICATION NUMBER: USSN 09/787,835
;  PRIOR FILING DATE: 2001-03-22
;  PRIOR APPLICATION NUMBER: USSN 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 60
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
;   LENGTH: 859
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-287-035-7

  Query Match            100.0%;  Score 1263;  DB 14;  Length 859;
  Best Local Similarity  100.0%;  Pred. No. 4.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        622 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 681

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        682 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 741

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        742 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 801

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        802 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 853


RESULT 169
US-10-282-162-7
; Sequence 7, Application US/10282162
; Publication No. US20030143697A1
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-B-US
;  CURRENT APPLICATION NUMBER: US/10/282,162
;  CURRENT FILING DATE:  2002-10-28
;  PRIOR APPLICATION NUMBER: 09/787,835
;  PRIOR FILING DATE: 1999-09-22
;  PRIOR APPLICATION NUMBER: PCT/US99/22045
;  PRIOR FILING DATE: 1999-09-22
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
;   LENGTH: 859
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-282-162-7

  Query Match            100.0%;  Score 1263;  DB 14;  Length 859;
  Best Local Similarity  100.0%;  Pred. No. 4.8e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        622 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 681

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        682 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 741

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        742 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 801

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        802 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 853


RESULT 170
US-09-313-942-9
; Sequence 9, Application US/09313942
; Publication No. US20020012962A1
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-A
;  CURRENT APPLICATION NUMBER: US/09/313,942
;  CURRENT FILING DATE:  1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 32
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 9
;   LENGTH: 951
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-313-942-9

  Query Match            100.0%;  Score 1263;  DB 9;  Length 951;
  Best Local Similarity  100.0%;  Pred. No. 5.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 779

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 899

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 951


RESULT 171
US-09-935-868-9
; Sequence 9, Application US/09935868
; Patent No. US20020164690A1
; GENERAL INFORMATION:
;  APPLICANT: Regeneron Pharmaceuticals, Inc
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;  TITLE OF INVENTION: Receptor Based Antagonists, and Methods of Making and Using
;  FILE REFERENCE: REG 203D
;  CURRENT APPLICATION NUMBER: US/09/935,868
;  CURRENT FILING DATE:  2002-04-11
;  PRIOR APPLICATION NUMBER: PCT/US99/22045
;  PRIOR FILING DATE: 1999-09-22
;  NUMBER OF SEQ ID NOS: 52
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9
;   LENGTH: 951
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-935-868-9

  Query Match             100.0%;  Score 1263;  DB 9;  Length 951;
  Best Local Similarity   100.0%;  Pred. No. 5.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 779

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 899

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 951


RESULT 172
US-10-287-035-9
; Sequence 9, Application US/10287035
; Publication No. US20030104567A1
; GENERAL INFORMATION:
;  APPLICANT: Neil Stahl and George D. Yancopoulos
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203DA
;  CURRENT APPLICATION NUMBER: US/10/287,035
;  CURRENT FILING DATE:  2002-11-01
;  PRIOR APPLICATION NUMBER: USSN 09/935,868
;  PRIOR FILING DATE: 2001-08-23
;  PRIOR APPLICATION NUMBER: USSN 09/787,835
;  PRIOR FILING DATE: 2001-03-22
;  PRIOR APPLICATION NUMBER: USSN 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 09/313,942
;  PRIOR FILING DATE: 1999-05-19
;  PRIOR APPLICATION NUMBER: 60/101,858
;  PRIOR FILING DATE: 1998-09-25
;  NUMBER OF SEQ ID NOS: 60
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 9
;   LENGTH: 951
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-287-035-9

  Query Match             100.0%;  Score 1263;  DB 14;  Length 951;
  Best Local Similarity   100.0%;  Pred. No. 5.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 779

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 899

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 951


RESULT 173
US-10-282-162-9
; Sequence 9, Application US/10282162
; Publication No. US20030143697A1
; GENERAL INFORMATION:
;  APPLICANT: REGENERON PHARMACEUTICALS, INC.
;  TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
;  TITLE OF INVENTION:  AND USING
;  FILE REFERENCE: REG 203-B-US
;  CURRENT APPLICATION NUMBER: US/10/282,162
;  CURRENT FILING DATE:  2002-10-28
;  PRIOR APPLICATION NUMBER: 09/787,835
;  PRIOR FILING DATE: 1999-09-22
;  PRIOR APPLICATION NUMBER: PCT/US99/22045
;  PRIOR FILING DATE: 1999-09-22
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 9
;   LENGTH: 951
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-282-162-9

  Query Match             100.0%;  Score 1263;  DB 14;  Length 951;
  Best Local Similarity   100.0%;  Pred. No. 5.4e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 779

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 839

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 899

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 951


RESULT 174
US-10-418-836-38
; Sequence 38, Application US/10418836
; Publication No. US20040018573A1
; GENERAL INFORMATION:
;  APPLICANT: Power, Scott D.
;  APPLICANT:  Wang, Huaming
;  APPLICANT:  Ward, Michael
;  TITLE OF INVENTION: Production of Functional Antibodies in
;  TITLE OF INVENTION:  Filamentous Fungi
;  FILE REFERENCE: GC741-2
;  CURRENT APPLICATION NUMBER: US/10/418,836
;  CURRENT FILING DATE:  2003-04-17
;  PRIOR APPLICATION NUMBER: US 60/373,889
;  PRIOR FILING DATE: 2002-04-18
;  PRIOR APPLICATION NUMBER: US 60/411,540
;  PRIOR FILING DATE: 2002-09-18
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;  PRIOR APPLICATION NUMBER: US 60/452,134
;  PRIOR FILING DATE: 2003-03-04
;  PRIOR APPLICATION NUMBER: US 60/411,537
;  PRIOR FILING DATE: 2002-09-18
;  NUMBER OF SEQ ID NOS: 40
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 38
;   LENGTH: 972
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: fusion protein
US-10-418-836-38

  Query Match           100.0%;  Score 1263;  DB 15;  Length 972;
  Best Local Similarity  100.0%;  Pred. No. 5.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        741 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 800

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        801 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 860

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        861 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 920

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        921 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 972


RESULT 175
US-10-418-836-39
; Sequence 39, Application US/10418836
; Publication No. US20040018573A1
; GENERAL INFORMATION:
;  APPLICANT: Power, Scott D.
;  APPLICANT:  Wang, Huaming
;  APPLICANT:  Ward, Michael
;  TITLE OF INVENTION: Production of Functional Antibodies in
;  TITLE OF INVENTION:  Filamentous Fungi
;  FILE REFERENCE: GC741-2
;  CURRENT APPLICATION NUMBER: US/10/418,836
;  CURRENT FILING DATE:  2003-04-17
;  PRIOR APPLICATION NUMBER: US 60/373,889
;  PRIOR FILING DATE: 2002-04-18
;  PRIOR APPLICATION NUMBER: US 60/411,540
;  PRIOR FILING DATE: 2002-09-18
;  PRIOR APPLICATION NUMBER: US 60/452,134
;  PRIOR FILING DATE: 2003-03-04
;  PRIOR APPLICATION NUMBER: US 60/411,537
;  PRIOR FILING DATE: 2002-09-18
;  NUMBER OF SEQ ID NOS: 40
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 39
;   LENGTH: 975
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: fusion protein
US-10-418-836-39

  Query Match           100.0%;  Score 1263;  DB 15;  Length 975;
  Best Local Similarity  100.0%;  Pred. No. 5.5e-92;
  Matches  232;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        744 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 803

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        804 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 863

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        864 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 923

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        924 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK 975


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